

GenCore version 5.1.6  
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OM protein - protein search, using sw model

Run on: December 4, 2005, 05:56:11 ; Search time 164 Seconds

(without alignments)  
1054.764 Million cell updates/sec

Title: US-09-990-087-17

Perfect score: 2118

Sequence: 1 MGHHHHHIEGRLLKLDND.....SFKVSLSALEETKLTNTQ 414

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 1867569 seqs, 417829326 residues

Total number of hits satisfying chosen parameters: 1867569

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Published Applications AA Main:

- 1: /cgn2\_6/ptodata/1/pubpaa/US07\_PUBCOMB.pep.\*
- 2: /cgn2\_6/ptodata/1/pubpaa/US08\_PUBCOMB.pep.\*
- 3: /cgn2\_6/ptodata/1/pubpaa/US09\_PUBCOMB.pep.\*
- 4: /cgn2\_6/ptodata/1/pubpaa/US10A\_PUBCOMB.pep.\*
- 5: /cgn2\_6/ptodata/1/pubpaa/US10B\_PUBCOMB.pep.\*
- 6: /cgn2\_6/ptodata/1/pubpaa/US11\_PUBCOMB.pep.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	2118	100.0	414	4	US-10-465-789A-17
2	2118	100.0	414	5	US-10-979-506-17
3	2118	100.0	414	6	US-11-033-489-17
4	2118	100.0	1094	6	US-11-033-489-119
5	2104	99.3	422	4	US-10-465-789A-19
6	2104	99.3	422	5	US-10-979-506-19
7	2104	99.3	422	6	US-11-033-489-19
8	2049.5	96.8	423	6	US-11-033-489-96
9	1983	93.6	392	4	US-10-465-789A-45
10	1983	93.6	392	5	US-10-979-506-45
11	1983	93.6	392	6	US-11-033-489-45
12	1944.5	91.8	401	6	US-11-033-489-98
13	1923.5	90.8	397	6	US-11-033-489-111
14	1896	89.5	392	4	US-11-033-489-99
15	1839.5	86.9	381	4	US-10-465-789A-86
16	1839.5	86.9	381	6	US-11-033-489-86
17	1820.5	86.0	383	6	US-11-033-489-113
18	1439.5	68.0	381	6	US-11-033-489-117
19	1435.5	67.8	379	6	US-11-033-489-115
20	1319.5	62.3	289	6	US-11-033-489-94
21	1269	59.9	278	6	US-11-033-489-95
22	1204	56.8	278	4	US-10-465-789A-75
23	1204	56.8	278	6	US-11-033-489-75
24	1115	52.6	234	4	US-10-465-789A-73
25	1115	52.6	234	6	US-11-033-489-73
26	1094	51.7	256	4	US-10-465-789A-74
27	1094	51.7	256	6	US-11-033-489-74

28	1093	51.6	212	4	US-10-465-789A-6	Sequence 6, Appli
29	1093	51.6	212	5	US-10-979-506-6	Sequence 6, Appli
30	1093	51.6	212	6	US-11-033-489-6	Sequence 6, Appli
31	1085	51.2	212	6	US-11-033-489-131	Sequence 131, App
32	1085	51.2	212	6	US-11-033-489-133	Sequence 133, App
33	1085	51.2	212	6	US-11-033-489-135	Sequence 135, App
34	1065	50.3	336	3	US-09-987-107-44	Sequence 44, Appl
35	1065	50.3	336	6	US-11-017-037-44	Sequence 44, Appl
36	1065	50.3	336	6	US-11-017-037-44	Sequence 44, Appl
37	1063.5	50.2	337	3	US-09-987-107-46	Sequence 46, Appl
38	1063.5	50.2	337	6	US-11-017-037-46	Sequence 46, Appl
39	1063.5	50.2	337	6	US-11-017-059-46	Sequence 62, Appl
40	1057	49.9	324	3	US-09-987-107-62	Sequence 62, Appl
41	1057	49.9	324	6	US-11-017-037-62	Sequence 62, Appl
42	1057	49.9	324	6	US-11-017-059-62	Sequence 62, Appl
43	1056	49.9	316	3	US-09-987-107-48	Sequence 48, Appl
44	1056	49.9	316	6	US-11-017-037-48	Sequence 48, Appl
45	1056	49.9	316	6	US-11-017-059-48	Sequence 48, Appl

ALIGNMENTS

RESULT 1  
US-10-465-789A-17  
; Sequence 17, Application US/10465789A  
; Publication No. US20040053384A1  
; GENERAL INFORMATION:  
; APPLICANT: Sligar, Stephen G  
; APPLICANT: Bayburt, Timothy H  
; APPLICANT: Schuler, Mary A  
; APPLICANT: Civjan, Natanya R  
; APPLICANT: Yelena V. Grinkova  
; APPLICANT: Iliia G. Denisov  
; TITLE OF INVENTION: Membrane Scaffold Proteins  
; FILE REFERENCE: 87-00A  
; CURRENT APPLICATION NUMBER: US/10/465.789A  
; CURRENT FILING DATE: 2003-06-18  
; PRIOR APPLICATION NUMBER: 09/990,087  
; PRIOR FILING DATE: 2001-11-20  
; PRIOR APPLICATION NUMBER: 60/252,233  
; PRIOR FILING DATE: 2000-11-20  
; NUMBER OF SEQ ID NOS: 89  
; SOFTWARE: PatentIn version 3.1  
; SEQ ID NO 17  
; LENGTH: 414  
; TYPE: PRT  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: His-tagged MSP2  
US-10-465-789A-17

Query Match	100.0%	Score	2118;	DB	4;	Length	414;
Best Local Similarity	100.0%	Pred. No.	4.3e-120;				
Matches	414;	Conservative	0;	Mismatches	0;	Indels	0;
Gaps	0;						
QY	1	MGHHHHHIEGRLLKLDNDSDVTSTFSKRLQGLGPVTQEFWDNLEKETEGLRQEMSKDLE	60				
DB	1	MGHHHHHIEGRLLKLDNDSDVTSTFSKRLQGLGPVTQEFWDNLEKETEGLRQEMSKDLE	60				
QY	61	EVKAKVQPYLDDFQKKWQEMELRYQKVEPLRAELQEGARQKLHQLKELSPLGEMRDR	120				
DB	61	EVKAKVQPYLDDFQKKWQEMELRYQKVEPLRAELQEGARQKLHQLKELSPLGEMRDR	120				
QY	121	ARAHVDALRTHLAPYSDELRLQRLAARLBALKENGARLAAYHAKATEHLSTLSEKAKPAL	180				
DB	121	ARAHVDALRTHLAPYSDELRLQRLAARLBALKENGARLAAYHAKATEHLSTLSEKAKPAL	180				
QY	181	EDLRQGLLPVLESFKVSLSALEETTKLTNTQGLTKLDNDSDVTSTFSKRLQGLGPVTQ	240				
DB	181	EDLRQGLLPVLESFKVSLSALEETTKLTNTQGLTKLDNDSDVTSTFSKRLQGLGPVTQ	240				
QY	241	EFWDNLEKETEGLRQEMSKDLEEVKAKVQPYLDDFQKKWQEMELRYQKVEPLRAELQEG	300				

Db 241 EFWDNLEKETGLRQEMSKDLEEVKAKVQPYLDDFQKKWQEMELYRQKVEPLRAELQEG 300  
QY 301 ARQKHELQEKLSPLGEMRDRARAHVDALRTHLAPYSDELQRRLAARLEALKENGARGL 360  
Db 301 ARQKHELQEKLSPLGEMRDRARAHVDALRTHLAPYSDELQRRLAARLEALKENGARGL 360  
QY 361 AEYHAKATEHLSTLSEKAKPALEDLROGLLPVLESFKVSFLSALEEYTKKLNQ 414  
Db 361 AEYHAKATEHLSTLSEKAKPALEDLROGLLPVLESFKVSFLSALEEYTKKLNQ 414

## RESULT 2

US-10-979-506-17  
; Sequence 17, Application US/10979506  
; Publication No. US20050152984A1  
; GENERAL INFORMATION:  
; APPLICANT: Sligar, Stephen G  
; APPLICANT: Bayburt, Timothy H  
; TITLE OF INVENTION: Membrane Scaffold Proteins  
; FILE REFERENCE: 87-00C  
; CURRENT APPLICATION NUMBER: US/10/979,506  
; PRIOR FILING DATE: 2004-11-02  
; PRIOR APPLICATION NUMBER: 09/990,087  
; PRIOR FILING DATE: 2001-11-20  
; PRIOR APPLICATION NUMBER: 60/252,233  
; PRIOR FILING DATE: 2000-11-20  
; NUMBER OF SEQ ID NOS: 46  
; SOFTWARE: Patent in version 3.1  
; SEQ ID NO 17  
; LENGTH: 414  
; TYPE: PRT  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: His-tagged MSP2  
US-10-979-506-17

Query Match 100.0%; Score 2118; DB 5; Length 414;  
Best Local Similarity 100.0%; Pred. No. 4.3e-120;  
Matches 414; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 MGHHHHHIEGRLLKLLDNWDSVTSTFSKRLRQLGPTVQEFWDNLEKETEGRLRQEMSKDLE 60  
Db 1 MGHHHHHIEGRLLKLLDNWDSVTSTFSKRLRQLGPTVQEFWDNLEKETEGRLRQEMSKDLE 60  
QY 61 EVKAKVQPYLDDFQKKWQEMELYRQKVEPLRAELQEGARQKHELQEKLSPLGEMRDR 120  
Db 61 EVKAKVQPYLDDFQKKWQEMELYRQKVEPLRAELQEGARQKHELQEKLSPLGEMRDR 120  
QY 121 ARAHVDAALRTHLAPYSDELQRRLAARLEALKENGARGARLAAYHAKATEHLSTLSEKAKPAL 180  
Db 121 ARAHVDAALRTHLAPYSDELQRRLAARLEALKENGARGARLAAYHAKATEHLSTLSEKAKPAL 180  
QY 181 EDLRQGLLPVLESFKVSFLSALEEYTKKLNQGTGLKLLDNWDSVTSTFSKRLRQLGPTVQ 240  
Db 181 EDLRQGLLPVLESFKVSFLSALEEYTKKLNQGTGLKLLDNWDSVTSTFSKRLRQLGPTVQ 240  
QY 241 EFWDNLEKETEGRLRQEMSKDLEEVKAKVQPYLDDFQKKWQEMELYRQKVEPLRAELQEG 300  
Db 241 EFWDNLEKETEGRLRQEMSKDLEEVKAKVQPYLDDFQKKWQEMELYRQKVEPLRAELQEG 300  
QY 301 ARQKHELQEKLSPLGEMRDRARAHVDALRTHLAPYSDELQRRLAARLEALKENGARGL 360  
Db 301 ARQKHELQEKLSPLGEMRDRARAHVDALRTHLAPYSDELQRRLAARLEALKENGARGL 360  
QY 361 AEYHAKATEHLSTLSEKAKPALEDLROGLLPVLESFKVSFLSALEEYTKKLNQ 414  
Db 361 AEYHAKATEHLSTLSEKAKPALEDLROGLLPVLESFKVSFLSALEEYTKKLNQ 414

## RESULT 3

US-11-033-489-17  
; Sequence 17, Application US/11033489

; Publication No. US20050182243A1  
; GENERAL INFORMATION:  
; APPLICANT: Sligar, Stephen G  
; APPLICANT: Bayburt, Timothy H  
; APPLICANT: Schuler, Mary A  
; APPLICANT: Civjan, Natanya R  
; APPLICANT: Grinkova, Yelena V.  
; APPLICANT: Denisov, Iliia G.  
; APPLICANT: Grimme, Stephen G.  
; TITLE OF INVENTION: Membrane Scaffold Proteins  
; FILE REFERENCE: 87-00B  
; CURRENT APPLICATION NUMBER: US/11/033,489  
; PRIOR FILING DATE: 2005-01-11  
; PRIOR APPLICATION NUMBER: 09/990,087  
; PRIOR FILING DATE: 2001-11-20  
; PRIOR APPLICATION NUMBER: 10/465,789  
; PRIOR FILING DATE: 2003-06-18  
; PRIOR APPLICATION NUMBER: 60/536,281  
; PRIOR FILING DATE: 2004-01-13  
; PRIOR APPLICATION NUMBER: 60/252,233  
; PRIOR FILING DATE: 2000-11-20  
; NUMBER OF SEQ ID NOS: 136  
; SOFTWARE: Patent in version 3.3  
; SEQ ID NO 17  
; LENGTH: 414  
; TYPE: PRT  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: His-tagged MSP2  
US-11-033-489-17

Query Match 100.0%; Score 2118; DB 6; Length 414;  
Best Local Similarity 100.0%; Pred. No. 4.3e-120;  
Matches 414; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 MGHHHHHIEGRLLKLLDNWDSVTSTFSKRLRQLGPTVQEFWDNLEKETEGRLRQEMSKDLE 60  
Db 1 MGHHHHHIEGRLLKLLDNWDSVTSTFSKRLRQLGPTVQEFWDNLEKETEGRLRQEMSKDLE 60  
QY 61 EVKAKVQPYLDDFQKKWQEMELYRQKVEPLRAELQEGARQKHELQEKLSPLGEMRDR 120  
Db 61 EVKAKVQPYLDDFQKKWQEMELYRQKVEPLRAELQEGARQKHELQEKLSPLGEMRDR 120  
QY 121 ARAHVDAALRTHLAPYSDELQRRLAARLEALKENGARGARLAAYHAKATEHLSTLSEKAKPAL 180  
Db 121 ARAHVDAALRTHLAPYSDELQRRLAARLEALKENGARGARLAAYHAKATEHLSTLSEKAKPAL 180  
QY 181 EDLRQGLLPVLESFKVSFLSALEEYTKKLNQGTGLKLLDNWDSVTSTFSKRLRQLGPTVQ 240  
Db 181 EDLRQGLLPVLESFKVSFLSALEEYTKKLNQGTGLKLLDNWDSVTSTFSKRLRQLGPTVQ 240  
QY 241 EFWDNLEKETEGRLRQEMSKDLEEVKAKVQPYLDDFQKKWQEMELYRQKVEPLRAELQEG 300  
Db 241 EFWDNLEKETEGRLRQEMSKDLEEVKAKVQPYLDDFQKKWQEMELYRQKVEPLRAELQEG 300  
QY 301 ARQKHELQEKLSPLGEMRDRARAHVDALRTHLAPYSDELQRRLAARLEALKENGARGL 360  
Db 301 ARQKHELQEKLSPLGEMRDRARAHVDALRTHLAPYSDELQRRLAARLEALKENGARGL 360  
QY 361 AEYHAKATEHLSTLSEKAKPALEDLROGLLPVLESFKVSFLSALEEYTKKLNQ 414  
Db 361 AEYHAKATEHLSTLSEKAKPALEDLROGLLPVLESFKVSFLSALEEYTKKLNQ 414

## RESULT 4

US-11-033-489-119  
; Sequence 119, Application US/11033489  
; Publication No. US20050182243A1  
; GENERAL INFORMATION:  
; APPLICANT: Sligar, Stephen G  
; APPLICANT: Bayburt, Timothy H  
; APPLICANT: Schuler, Mary A  
; APPLICANT: Civjan, Natanya R

APPLICANT: Grinkova, Yelena V.  
APPLICANT: Denisov, Iliia G.  
APPLICANT: Grimmer, Stephen G.  
TITLE OF INVENTION: Membrane Scaffold Proteins  
FILE REFERENCE: 87-00B  
CURRENT APPLICATION NUMBER: US/11/033,489  
CURRENT FILING DATE: 2005-01-11  
PRIOR APPLICATION NUMBER: 09/990,087  
PRIOR FILING DATE: 2001-11-20  
PRIOR APPLICATION NUMBER: 10/465,789  
PRIOR FILING DATE: 2003-06-18  
PRIOR APPLICATION NUMBER: 60/536,281  
PRIOR FILING DATE: 2004-01-13  
PRIOR APPLICATION NUMBER: 60/252,233  
PRIOR FILING DATE: 2000-11-20  
NUMBER OF SEQ ID NOS: 136  
SOFTWARE: PatentIn version 3.3  
SEQ ID NO 119  
LENGTH: 1094  
TYPE: PRT  
ORGANISM: Artificial  
FEATURE:  
OTHER INFORMATION: MSP2CPR  
US-11-033-489-119

Query Match 100.0%; Score 2118; DB 6; Length 1094;  
Best Local Similarity 100.0%; Pred. No. 1.3e-119; Mismatches 0; Indels 0; Gaps 0;  
Matches 414; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 1 MGHHHHHIEGRLLKLLDNWDSVTSTFSKLRQLQGPVTQEFWDNLEKETEGLRQEMSKDLE 60  
Db 1 MGHHHHHIEGRLLKLLDNWDSVTSTFSKLRQLQGPVTQEFWDNLEKETEGLRQEMSKDLE 60  
Qy 61 EVKAKVQPYLDDFQKKWQEEEMELYRQKVEPLRAELQEGARQKJHELOEKLSPLGEEMRDR 120  
Db 61 EVKAKVQPYLDDFQKKWQEEEMELYRQKVEPLRAELQEGARQKJHELOEKLSPLGEEMRDR 120  
Qy 121 ARAHVDAALRTHLAPYSDELRLQRLAARLEALKENGARLAELAEYHAKATEHLSLSEKAKPAL 180  
Db 121 ARAHVDAALRTHLAPYSDELRLQRLAARLEALKENGARLAELAEYHAKATEHLSLSEKAKPAL 180  
Qy 181 EDLRQGLLPVLESFKVSLALEEYTKKLTQGTGLKLLDNWDSVTSTFSKLRQLQGPVTQ 240  
Db 181 EDLRQGLLPVLESFKVSLALEEYTKKLTQGTGLKLLDNWDSVTSTFSKLRQLQGPVTQ 240  
Qy 241 EFWNLEKETEGRLQEMSKDLEEVKAKVQPYLDDFQKKWQEEEMELYRQKVEPLRAELQEG 300  
Db 241 EFWNLEKETEGRLQEMSKDLEEVKAKVQPYLDDFQKKWQEEEMELYRQKVEPLRAELQEG 300  
Qy 301 ARQKJHELOEKLSPLGEEMRDRARAHVDALRTHLAPYSDELRLQRLAARLEALKENGARL 360  
Db 301 ARQKJHELOEKLSPLGEEMRDRARAHVDALRTHLAPYSDELRLQRLAARLEALKENGARL 360  
Qy 361 AEYHAKATEHLSLSEKAKPALEDLRQGLLPVLESFKVSLALEEYTKKLTQ 414  
Db 361 AEYHAKATEHLSLSEKAKPALEDLRQGLLPVLESFKVSLALEEYTKKLTQ 414

RESULT 5  
US-10-465-789A-19  
Sequence 19, Application US/10465789A  
Publication No. US20040053384A1  
GENERAL INFORMATION:  
APPLICANT: Sligar, Stephen G  
APPLICANT: Bayburt, Timothy H  
APPLICANT: Schuler, Mary A  
APPLICANT: Civjan, Natanva R  
APPLICANT: Yelena V. Grinkova  
APPLICANT: Iliia G. Denisov  
TITLE OF INVENTION: Membrane Scaffold Proteins  
FILE REFERENCE: 87-00A  
CURRENT APPLICATION NUMBER: US/10/465,789A  
CURRENT FILING DATE: 2003-06-18

PRIOR APPLICATION NUMBER: 09/990,087  
PRIOR FILING DATE: 2001-11-20  
PRIOR APPLICATION NUMBER: 60/252,233  
PRIOR FILING DATE: 2000-11-20  
NUMBER OF SEQ ID NOS: 89  
SOFTWARE: PatentIn version 3.1  
SEQ ID NO 19  
LENGTH: 422  
TYPE: PRT  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: His-tagged MSP2L  
US-10-465-789A-19

Query Match 99.3%; Score 2104; DB 4; Length 422;  
Best Local Similarity 98.1%; Pred. No. 3.1e-119;  
Matches 414; Conservative 0; Mismatches 0; Indels 8; Gaps 1;  
Qy 1 MGHHHHHIEGRLLKLLDNWDSVTSTFSKLRQLQGPVTQEFWDNLEKETEGLRQEMSKDLE 60  
Db 1 MGHHHHHIEGRLLKLLDNWDSVTSTFSKLRQLQGPVTQEFWDNLEKETEGLRQEMSKDLE 60  
Qy 61 EVKAKVQPYLDDFQKKWQEEEMELYRQKVEPLRAELQEGARQKJHELOEKLSPLGEEMRDR 120  
Db 61 EVKAKVQPYLDDFQKKWQEEEMELYRQKVEPLRAELQEGARQKJHELOEKLSPLGEEMRDR 120  
Qy 121 ARAHVDAALRTHLAPYSDELRLQRLAARLEALKENGARLAELAEYHAKATEHLSLSEKAKPAL 180  
Db 121 ARAHVDAALRTHLAPYSDELRLQRLAARLEALKENGARLAELAEYHAKATEHLSLSEKAKPAL 180  
Qy 181 EDLRQGLLPVLESFKVSLALEEYTKKLTQGTGLKLLDNWDSVTSTFSKLR 232  
Db 181 EDLRQGLLPVLESFKVSLALEEYTKKLTQGTGLKLLDNWDSVTSTFSKLR 240  
Qy 233 EQLGPVTQEFWDNLEKETEGLRQEMSKDLEEVKAKVQPYLDDFQKKWQEEEMELYRQKVEP 292  
Db 241 EQLGPVTQEFWDNLEKETEGLRQEMSKDLEEVKAKVQPYLDDFQKKWQEEEMELYRQKVEP 300  
Qy 293 LRSELQEGARQKJHELOEKLSPLGEEMRDRARAHVDALRTHLAPYSDELRLQRLAARLEAL 352  
Db 301 LRSELQEGARQKJHELOEKLSPLGEEMRDRARAHVDALRTHLAPYSDELRLQRLAARLEAL 360  
Qy 353 KENGARLAELAEYHAKATEHLSLSEKAKPALEDLRQGLLPVLESFKVSLALEEYTKKLT 412  
Db 361 KENGARLAELAEYHAKATEHLSLSEKAKPALEDLRQGLLPVLESFKVSLALEEYTKKLT 420  
Qy 413 TQ 414  
Db 421 TQ 422

RESULT 6  
US-10-979-506-19  
Sequence 19, Application US/10979506  
Publication No. US20050152984A1  
GENERAL INFORMATION:  
APPLICANT: Sligar, Stephen G  
APPLICANT: Bayburt, Timothy H  
TITLE OF INVENTION: Membrane Scaffold Proteins  
FILE REFERENCE: 87-00C  
CURRENT APPLICATION NUMBER: US/10/979,506  
CURRENT FILING DATE: 2004-11-02  
PRIOR APPLICATION NUMBER: 09/990,087  
PRIOR FILING DATE: 2001-11-20  
PRIOR APPLICATION NUMBER: 60/252,233  
PRIOR FILING DATE: 2000-11-20  
NUMBER OF SEQ ID NOS: 46  
SOFTWARE: PatentIn version 3.1  
SEQ ID NO 19  
LENGTH: 422  
TYPE: PRT  
ORGANISM: Artificial Sequence  
FEATURE:

OTHER INFORMATION: His-tagged MSP2L  
US-10-979-506-19

Query Match 99.3%; Score 2104; DB 5; Length 422;  
Best Local Similarity 98.1%; Pred. No. 3.1e-119;  
Matches 414; Conservative 0; Mismatches 0; Indels 8; Gaps 1;  
QY 1 MGHHHHHHIEGRKLLDNWDSVTSTFSKLRQELGPTVQEFWDNLEKETEGLRQEMSKDLE 60  
DB 1 MGHHHHHHIEGRKLLDNWDSVTSTFSKLRQELGPTVQEFWDNLEKETEGLRQEMSKDLE 60  
QY 61 EVKAKVQPYLDDDFQKKWQEMELYRQKVEPLRAELQEGARQKLHELOEKLSPGLGEEMRDR 120  
DB 61 EVKAKVQPYLDDDFQKKWQEMELYRQKVEPLRAELQEGARQKLHELOEKLSPGLGEEMRDR 120  
QY 121 ARAHVDAALRTHLAPYSDELQRLAARLEALKENGARLAAYHAKATEHLSTLSEKAKPAL 180  
DB 121 ARAHVDAALRTHLAPYSDELQRLAARLEALKENGARLAAYHAKATEHLSTLSEKAKPAL 180  
QY 181 EDLRQGLLPVLESFKVSFLSALBEYTKKLTQ-----GTLKLLDNWDSVTSTFSKLR 232  
DB 181 EDLRQGLLPVLESFKVSFLSALBEYTKKLTQ-----GTLKLLDNWDSVTSTFSKLR 240  
QY 233 EQLGPTVQEFWDNLEKETEGLRQEMSKDLEEVKAKVQPYLDDDFQKKWQEMELYRQKVEP 292  
DB 241 EQLGPTVQEFWDNLEKETEGLRQEMSKDLEEVKAKVQPYLDDDFQKKWQEMELYRQKVEP 300  
QY 293 LRAELQEGARQKLHELOEKLSPGLGEEMRDRARAHVDALRTHLAPYSDELQRLAARLEAL 352  
DB 301 LRAELQEGARQKLHELOEKLSPGLGEEMRDRARAHVDALRTHLAPYSDELQRLAARLEAL 360  
QY 353 KENGARLAAYHAKATEHLSTLSEKAKPALEDLRQGLLPVLESFKVSFLSALBEYTKKLN 412  
DB 361 KENGARLAAYHAKATEHLSTLSEKAKPALEDLRQGLLPVLESFKVSFLSALBEYTKKLN 420  
QY 413 TQ 414  
DB 421 TQ 422

## RESULT 7

US-11-033-489-19  
Sequence 19, Application US/11033489  
Publication No. US20050182243A1  
GENERAL INFORMATION:  
APPLICANT: Sligar, Stephen G  
APPLICANT: Bayburt, Timothy H  
APPLICANT: Schuler, Mary A  
APPLICANT: Civjan, Natanya R  
APPLICANT: Grinkova, Yelena V.  
APPLICANT: Denisov, Iliia G.  
APPLICANT: Grimme, Stephen G.  
TITLE OF INVENTION: Membrane Scaffold Proteins  
FILE REFERENCE: 87-00B  
CURRENT APPLICATION NUMBER: US/11/033,489  
PRIOR FILING DATE: 2005-01-11  
PRIOR APPLICATION NUMBER: 09/990,087  
PRIOR FILING DATE: 2001-11-20  
PRIOR APPLICATION NUMBER: 10/465,789  
PRIOR FILING DATE: 2003-06-18  
PRIOR APPLICATION NUMBER: 60/536,281  
PRIOR FILING DATE: 2004-01-13  
PRIOR APPLICATION NUMBER: 60/252,233  
PRIOR FILING DATE: 2000-11-20  
NUMBER OF SEQ ID NOS: 136  
SOFTWARE: PatentIn version 3.3  
SEQ ID NO 19  
LENGTH: 422  
TYPE: PRT  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: His-tagged MSP2L  
US-11-033-489-19

Query Match 99.3%; Score 2104; DB 6; Length 422;  
Best Local Similarity 98.1%; Pred. No. 3.1e-119;  
Matches 414; Conservative 0; Mismatches 0; Indels 8; Gaps 1;  
QY 1 MGHHHHHHIEGRKLLDNWDSVTSTFSKLRQELGPTVQEFWDNLEKETEGLRQEMSKDLE 60  
DB 1 MGHHHHHHIEGRKLLDNWDSVTSTFSKLRQELGPTVQEFWDNLEKETEGLRQEMSKDLE 60  
QY 61 EVKAKVQPYLDDDFQKKWQEMELYRQKVEPLRAELQEGARQKLHELOEKLSPGLGEEMRDR 120  
DB 61 EVKAKVQPYLDDDFQKKWQEMELYRQKVEPLRAELQEGARQKLHELOEKLSPGLGEEMRDR 120  
QY 121 ARAHVDAALRTHLAPYSDELQRLAARLEALKENGARLAAYHAKATEHLSTLSEKAKPAL 180  
DB 121 ARAHVDAALRTHLAPYSDELQRLAARLEALKENGARLAAYHAKATEHLSTLSEKAKPAL 180  
QY 181 EDLRQGLLPVLESFKVSFLSALBEYTKKLTQ-----GTLKLLDNWDSVTSTFSKLR 232  
DB 181 EDLRQGLLPVLESFKVSFLSALBEYTKKLTQ-----GTLKLLDNWDSVTSTFSKLR 240  
QY 233 EQLGPTVQEFWDNLEKETEGLRQEMSKDLEEVKAKVQPYLDDDFQKKWQEMELYRQKVEP 292  
DB 241 EQLGPTVQEFWDNLEKETEGLRQEMSKDLEEVKAKVQPYLDDDFQKKWQEMELYRQKVEP 300  
QY 293 LRAELQEGARQKLHELOEKLSPGLGEEMRDRARAHVDALRTHLAPYSDELQRLAARLEAL 352  
DB 301 LRAELQEGARQKLHELOEKLSPGLGEEMRDRARAHVDALRTHLAPYSDELQRLAARLEAL 360  
QY 353 KENGARLAAYHAKATEHLSTLSEKAKPALEDLRQGLLPVLESFKVSFLSALBEYTKKLN 412  
DB 361 KENGARLAAYHAKATEHLSTLSEKAKPALEDLRQGLLPVLESFKVSFLSALBEYTKKLN 420  
QY 413 TQ 414  
DB 421 TQ 422

## RESULT 8

US-11-033-489-96  
Sequence 96, Application US/11033489  
Publication No. US20050182243A1  
GENERAL INFORMATION:  
APPLICANT: Sligar, Stephen G  
APPLICANT: Bayburt, Timothy H  
APPLICANT: Schuler, Mary A  
APPLICANT: Civjan, Natanya R  
APPLICANT: Grinkova, Yelena V.  
APPLICANT: Denisov, Iliia G.  
APPLICANT: Grimme, Stephen G.  
TITLE OF INVENTION: Membrane Scaffold Proteins  
FILE REFERENCE: 87-00B  
CURRENT APPLICATION NUMBER: US/11/033,489  
PRIOR FILING DATE: 2005-01-11  
PRIOR APPLICATION NUMBER: 09/990,087  
PRIOR FILING DATE: 2001-11-20  
PRIOR APPLICATION NUMBER: 10/465,789  
PRIOR FILING DATE: 2003-06-18  
PRIOR APPLICATION NUMBER: 60/536,281  
PRIOR FILING DATE: 2004-01-13  
PRIOR APPLICATION NUMBER: 60/252,233  
PRIOR FILING DATE: 2000-11-20  
NUMBER OF SEQ ID NOS: 136  
SOFTWARE: PatentIn version 3.3  
SEQ ID NO 96  
LENGTH: 423  
TYPE: PRT  
ORGANISM: Artificial  
FEATURE:  
OTHER INFORMATION: MSP2TEV  
US-11-033-489-96  
Query Match 96.8%; Score 2049.5; DB 6; Length 423;

Best Local Similarity 96.0%; Pred. No. 6e-116;  
Matches 409; Conservative 1; Mismatches 1; Indels 15; Gaps 4;  
Qy 1 MGHHHHH-----TEGRKLLLDNWDSTSTFSKLRQLGPGVTOEFWDLNLEKET 48  
Db 1 MGHHHHHHDYDIPPTENLYFQG-LKLLDNWDSTSTFSKLRQLGPGVTOEFWDLNLEKET 59  
Qy 49 EGLQEQMSKDLLEEVKAKVQPYLDDFQKKWQEMELYRQKVEPLRAELQEGARQKLHELQ 108  
Db 60 EGLQEQMSKDLLEEVKAKVQPYLDDFQKKWQEMELYRQKVEPLRAELQEGARQKLHELQ 119  
Qy 109 KLSPLGEMDRARAHVDALRTHLAPYSDELQRLAARLEALKENGARLAAYHAKATEH 168  
Db 120 KLSPLGEMDRARAHVDALRTHLAPYSDELQRLAARLEALKENGARLAAYHAKATEH 179  
Qy 169 LSTLSEKAKPALEDLRQGLLPVLESFKVSFLSALSEYTKLNTQGLTKLLDNWDSTSTF 228  
Db 180 LSTLSEKAKPALEDLRQGLLPVLESFKVSFLSAL- EYTKLNTQGLTKLLDNWDSTSTF 238  
Qy 229 SKLRQLGPGVTOEFWDLNLEKETEGRLQEQMSKDLLEEVKAKVQPYLDDFQKKWQEMELYRQ 288  
Db 239 SKLRQLGPGVTOEFWDLNLEKETEGRLQEQM-KDLEEVKAKVQPYLDDFQKKWQEMELYRQ 297  
Qy 289 KVEPLRAELQEGARQKLHELQKLSPLGEMDRARAHVDALRTHLAPYSDELQRLAAR 348  
Db 298 KVEPLRAELQEGARQKLHELQKLSPLGEMDRARAHVDALRTHLAPYSDELQRLAAR 357  
Qy 349 LEALKENGARLAAYHAKATEHLSLSEKAKPALEDLRQGLLPVLESFKVSFLSALSEY 408  
Db 358 LEALKENGARLAAYHAKATEHLSLSEKAKPALEDLRQGLLPVLESFKVSFLSALSEY 417  
Qy 409 KKLNTQ 414  
Db 418 KKLNTQ 423

RESULT 9  
US-10-465-789A-45  
; Sequence 45, Application US/10465789A  
; Publication No. US20040053384A1  
; GENERAL INFORMATION:  
; APPLICANT: Sligar, Stephen G  
; APPLICANT: Bayburt, Timothy H  
; APPLICANT: Schuler, Mary A  
; APPLICANT: Civjan, Natanya R  
; APPLICANT: Yelena V. Grinkova  
; APPLICANT: Ilija G. Denisov  
; TITLE OF INVENTION: Membrane Scaffold Proteins  
; FILE REFERENCE: 87-00A  
; CURRENT APPLICATION NUMBER: US/10/465,789A  
; PRIOR FILING DATE: 2003-06-18  
; PRIOR APPLICATION NUMBER: 09/990,087  
; PRIOR FILING DATE: 2001-11-20  
; PRIOR APPLICATION NUMBER: 60/252,233  
; PRIOR FILING DATE: 2000-11-20  
; NUMBER OF SEQ ID NOS: 89  
; SOFTWARE: PatentIn version 3.1  
; SEQ ID NO 45  
; LENGTH: 392  
; TYPE: PRT  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: His-tagged MSP2 delta 1  
US-10-465-789A-45

Query Match 93.6%; Score 1983; DB 4; Length 392;  
Best Local Similarity 94.7%; Pred. No. 5.7e-112;  
Matches 392; Conservative 0; Mismatches 0; Indels 22; Gaps 2;  
Qy 1 MGHHHHHIEGRLLKLLDNWDSTSTFSKLRQLGPGVTOEFWDLNLEKETEGRLQEQMSKDL 60  
Db 1 MGHHHHHIEGRLLKLLDNWDSTSTFSKLRQLGPGVTOEFWDLNLEKETEGRLQEQMS 56

Qy 61 EVKAKVQPYLDDFQKKWQEMELYRQKVEPLRAELQEGARQKLHELQKLSPLGEMDRDR 120  
Db 57 -----PYLDDFQKKWQEMELYRQKVEPLRAELQEGARQKLHELQKLSPLGEMDRDR 109  
Qy 121 ARAHVDALRTHLAPYSDELQRLAARLEALKENGARLAAYHAKATEHLSLSEKAKPAL 180  
Db 110 ARAHVDALRTHLAPYSDELQRLAARLEALKENGARLAAYHAKATEHLSLSEKAKPAL 169  
Qy 181 EDLRQGLLPVLESFKVSFLSALSEYTKLNTQGLTKLLDNWDSTSTFSKLRQLGPGV 240  
Db 170 EDLRQGLLPVLESFKVSFLSALSEYTKLNTQGLTKLLDNWDSTSTFSKLRQLGPGV 229  
Qy 241 EFWDLNLEKETEGRLQEQMSKDLLEEVKAKVQPYLDDFQKKWQEMELYRQKVEPLRAELQ 300  
Db 230 EFWDLNLEKETEGRLQEQMS-----PYLDDFQKKWQEMELYRQKVEPLRAELQ 278  
Qy 301 AROKLEHLOKLSPLGEMDRARAHVDALRTHLAPYSDELQRLAARLEALKENGARL 360  
Db 279 AROKLEHLOKLSPLGEMDRARAHVDALRTHLAPYSDELQRLAARLEALKENGARL 338  
Qy 361 AEYHAKATEHLSLSEKAKPALEDLRQGLLPVLESFKVSFLSALSEYTKLNTQ 414  
Db 339 AEYHAKATEHLSLSEKAKPALEDLRQGLLPVLESFKVSFLSALSEYTKLNTQ 392

RESULT 10  
US-10-979-506-45  
; Sequence 45, Application US/10979506  
; Publication No. US20050152984A1  
; GENERAL INFORMATION:  
; APPLICANT: Sligar, Stephen G  
; APPLICANT: Bayburt, Timothy H  
; TITLE OF INVENTION: Membrane Scaffold Proteins  
; FILE REFERENCE: 87-00C  
; CURRENT APPLICATION NUMBER: US/10/979,506  
; CURRENT FILING DATE: 2004-11-02  
; PRIOR APPLICATION NUMBER: 09/990,087  
; PRIOR FILING DATE: 2001-11-20  
; PRIOR APPLICATION NUMBER: 60/252,233  
; PRIOR FILING DATE: 2000-11-20  
; NUMBER OF SEQ ID NOS: 46  
; SOFTWARE: PatentIn version 3.1  
; SEQ ID NO 45  
; LENGTH: 392  
; TYPE: PRT  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: His-tagged MSP2 delta 1  
US-10-979-506-45

Query Match 93.6%; Score 1983; DB 5; Length 392;  
Best Local Similarity 94.7%; Pred. No. 5.7e-112;  
Matches 392; Conservative 0; Mismatches 0; Indels 22; Gaps 2;  
Qy 1 MGHHHHHIEGRLLKLLDNWDSTSTFSKLRQLGPGVTOEFWDLNLEKETEGRLQEQMSKDL 60  
Db 1 MGHHHHHIEGRLLKLLDNWDSTSTFSKLRQLGPGVTOEFWDLNLEKETEGRLQEQMS 56  
Qy 61 EVKAKVQPYLDDFQKKWQEMELYRQKVEPLRAELQEGARQKLHELQKLSPLGEMDRDR 120  
Db 57 -----PYLDDFQKKWQEMELYRQKVEPLRAELQEGARQKLHELQKLSPLGEMDRDR 109  
Qy 121 ARAHVDALRTHLAPYSDELQRLAARLEALKENGARLAAYHAKATEHLSLSEKAKPAL 180  
Db 110 ARAHVDALRTHLAPYSDELQRLAARLEALKENGARLAAYHAKATEHLSLSEKAKPAL 169  
Qy 181 EDLRQGLLPVLESFKVSFLSALSEYTKLNTQGLTKLLDNWDSTSTFSKLRQLGPGV 240  
Db 170 EDLRQGLLPVLESFKVSFLSALSEYTKLNTQGLTKLLDNWDSTSTFSKLRQLGPGV 229  
Qy 241 EFWDLNLEKETEGRLQEQMSKDLLEEVKAKVQPYLDDFQKKWQEMELYRQKVEPLRAELQ 300  
Db 230 EFWDLNLEKETEGRLQEQMS-----PYLDDFQKKWQEMELYRQKVEPLRAELQ 278

Qy 301 AROKHELQKLSPLGEMDRARAHVDALRTHLAPYSDELQRLAARLEALKENGARL 360  
Db 279 ARQKHELQKLSPLGEMDRARAHVDALRTHLAPYSDELQRLAARLEALKENGARL 338  
Qy 361 AEYHAKATEHLSTLSEKAPALEDLRQGLLPVLESFKVLSALEEYTKKLNQ 414  
Db 339 AEYHAKATEHLSTLSEKAPALEDLRQGLLPVLESFKVLSALEEYTKKLNQ 392  
RESULT 11  
US-11-033-489-45  
; Sequence 45, Application US/11033489  
; Publication No. US20050182243A1  
; GENERAL INFORMATION:  
; APPLICANT: Sligar, Stephen G  
; APPLICANT: Bayburt, Timothy H  
; APPLICANT: Schuler, Mary A  
; APPLICANT: Civjan, Natanya R  
; APPLICANT: Grinkova, Yelena V.  
; APPLICANT: Denisov, Iliia G.  
; APPLICANT: Grimme, Stephen G.  
; TITLE OF INVENTION: Membrane Scaffold Proteins  
; FILE REFERENCE: 87-00B  
; CURRENT APPLICATION NUMBER: US/11/033,489  
; CURRENT FILING DATE: 2005-01-11  
; PRIOR FILING DATE: 2001-11-20  
; PRIOR FILING DATE: 2003-06-18  
; PRIOR FILING DATE: 2003-06-18  
; PRIOR FILING DATE: 2004-01-13  
; PRIOR FILING DATE: 2000-11-20  
; NUMBER OF SEQ ID NOS: 136  
; SOFTWARE: PatentIn version 3.3  
; SEQ ID NO 45  
; LENGTH: 392  
; TYPE: PRT  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: His-cagged MSP2 delta 1  
US-11-033-489-45  
Query Match 93.6%; Score 1983; DB 6; Length 392;  
Best Local Similarity 94.7%; Pred. No. 5.7e-112;  
Matches 392; Conservative 0; Mismatches 0; Indels 22; Gaps 2;  
Qy 1 MGHHHHHIEGRLLKLLDNWDSVTSTFSKLREQLGPTQEFWDNLEKETEGLRQEMSKDLE 60  
Db 1 MGHHHHHIEGRLLKLLDNWDSVTSTFSKLREQLGPTQEFWDNLEKETEGLRQEMSKDLE 56  
Qy 61 EVKAKVQPYLDDDFQKKQWQEMELYRQKVEPLRAELQEGARQKLHELQKLSPLGEEMRDR 120  
Db 57 -----PYLDDDFQKKQWQEMELYRQKVEPLRAELQEGARQKLHELQKLSPLGEEMRDR 109  
Qy 121 ARAHVDALRTHLAPYSDELQRLAARLEALKENGARLAAYHAKATEHLSTLSEKAPAL 180  
Db 110 ARAHVDALRTHLAPYSDELQRLAARLEALKENGARLAAYHAKATEHLSTLSEKAPAL 169  
Qy 181 EDLRQGLLPVLESFKVLSALEEYTKKLNQGTGLKLLDNWDSVTSTFSKLREQLGPTQ 240  
Db 170 EDLRQGLLPVLESFKVLSALEEYTKKLNQGTGLKLLDNWDSVTSTFSKLREQLGPTQ 229  
Qy 241 EFDNLEKETEGLRQEMSKDLEEVKAKVQPYLDDDFQKKQWQEMELYRQKVEPLRAELQEG 300  
Db 230 EFDNLEKETEGLRQEMSKDLEEVKAKVQPYLDDDFQKKQWQEMELYRQKVEPLRAELQEG 278  
Qy 301 AROKHELQKLSPLGEMDRARAHVDALRTHLAPYSDELQRLAARLEALKENGARL 360  
Db 279 ARQKHELQKLSPLGEMDRARAHVDALRTHLAPYSDELQRLAARLEALKENGARL 338  
Qy 361 AEYHAKATEHLSTLSEKAPALEDLRQGLLPVLESFKVLSALEEYTKKLNQ 414

Db 339 AEYHAKATEHLSTLSEKAPALEDLRQGLLPVLESFKVLSALEEYTKKLNQ 392  
RESULT 12  
US-11-033-489-98  
; Sequence 98, Application US/11033489  
; Publication No. US20050182243A1  
; GENERAL INFORMATION:  
; APPLICANT: Sligar, Stephen G  
; APPLICANT: Bayburt, Timothy H  
; APPLICANT: Schuler, Mary A  
; APPLICANT: Civjan, Natanya R  
; APPLICANT: Grinkova, Yelena V.  
; APPLICANT: Denisov, Iliia G.  
; APPLICANT: Grimme, Stephen G.  
; TITLE OF INVENTION: Membrane Scaffold Proteins  
; FILE REFERENCE: 87-00B  
; CURRENT APPLICATION NUMBER: US/11/033,489  
; CURRENT FILING DATE: 2005-01-11  
; PRIOR FILING DATE: 2001-11-20  
; PRIOR FILING DATE: 2003-06-18  
; PRIOR FILING DATE: 2003-06-18  
; PRIOR FILING DATE: 2004-01-13  
; PRIOR FILING DATE: 2000-11-20  
; NUMBER OF SEQ ID NOS: 136  
; SOFTWARE: PatentIn version 3.3  
; SEQ ID NO 98  
; LENGTH: 401  
; TYPE: PRT  
; ORGANISM: Artificial  
; FEATURE:  
; OTHER INFORMATION: MSP2N1  
US-11-033-489-98  
Query Match 91.8%; Score 1944.5; DB 6; Length 401;  
Best Local Similarity 93.5%; Pred. No. 1.2e-109;  
Matches 387; Conservative 3; Mismatches 11; Indels 13; Gaps 1;  
Qy 1 MGHHHHHIEGRLLKLLDNWDSVTSTFSKLREQLGPTQEFWDNLEKETEGLRQEMSKDLE 60  
Db 1 MGHHHHHHDYDIPPTTENLYFQGSTFSKLREQLGPTQEFWDNLEKETEGLRQEMSKDLE 60  
Qy 61 EVKAKVQPYLDDDFQKKQWQEMELYRQKVEPLRAELQEGARQKLHELQKLSPLGEEMRDR 120  
Db 61 EVKAKVQPYLDDDFQKKQWQEMELYRQKVEPLRAELQEGARQKLHELQKLSPLGEEMRDR 120  
Qy 121 ARAHVDALRTHLAPYSDELQRLAARLEALKENGARLAAYHAKATEHLSTLSEKAPAL 180  
Db 121 ARAHVDALRTHLAPYSDELQRLAARLEALKENGARLAAYHAKATEHLSTLSEKAPAL 180  
Qy 181 EDLRQGLLPVLESFKVLSALEEYTKKLNQGTGLKLLDNWDSVTSTFSKLREQLGPTQ 240  
Db 181 EDURQGLLPVLESFKVLSALEEYTKKLNQGTQ-----TFSKLRQGLGPTQ 227  
Qy 241 EFDNLEKETEGLRQEMSKDLEEVKAKVQPYLDDDFQKKQWQEMELYRQKVEPLRAELQEG 300  
Db 228 EFDNLEKETEGLRQEMSKDLEEVKAKVQPYLDDDFQKKQWQEMELYRQKVEPLRAELQEG 287  
Qy 301 AROKHELQKLSPLGEMDRARAHVDALRTHLAPYSDELQRLAARLEALKENGARL 360  
Db 288 AROKHELQKLSPLGEMDRARAHVDALRTHLAPYSDELQRLAARLEALKENGARL 347  
Qy 361 AEYHAKATEHLSTLSEKAPALEDLRQGLLPVLESFKVLSALEEYTKKLNQ 414  
Db 348 AEYHAKATEHLSTLSEKAPALEDLRQGLLPVLESFKVLSALEEYTKKLNQ 401  
RESULT 13  
US-11-033-489-111

; Sequence 111, Application US/11033489  
; Publication No. US20050182243A1  
; GENERAL INFORMATION:  
; APPLICANT: Sligar, Stephen G.  
; APPLICANT: Bayburt, Timothy H  
; APPLICANT: Schuler, Mary A  
; APPLICANT: Civjan, Natanya R  
; APPLICANT: Grinkova, Yelena V.  
; APPLICANT: Denisov, Iliya G.  
; APPLICANT: Grimme, Stephen G.  
; TITLE OF INVENTION: Membrane Scaffold Proteins  
; FILE REFERENCE: 87-00B  
; CURRENT APPLICATION NUMBER: US/11/033.489  
; CURRENT FILING DATE: 2005-01-11  
; PRIOR APPLICATION NUMBER: 09/990,087  
; PRIOR FILING DATE: 2001-11-20  
; PRIOR APPLICATION NUMBER: 10/465,789  
; PRIOR FILING DATE: 2003-06-18  
; PRIOR APPLICATION NUMBER: 60/536,281  
; PRIOR FILING DATE: 2004-01-13  
; PRIOR APPLICATION NUMBER: 60/252,233  
; PRIOR FILING DATE: 2000-11-20  
; NUMBER OF SEQ ID NOS: 136  
; SOFTWARE: Patent in version 3.3  
; SEQ ID NO 111  
; LENGTH: 397  
; TYPE: PRT  
; ORGANISM: Artificial  
; FEATURE:  
; OTHER INFORMATION: MSP2N3  
US-11-033-489-111

Query Match 90.8%; Score 1923.5; DB 6; Length 397;  
Best Local Similarity 92.5%; Pred. No. 2.3e-108;  
Matches 383; Conservative 3; Mismatches 11; Indels 17; Gaps 1;  
  
Qy 1 MGHHHHHIEGRLLKLLDNWDSVTSTFSKRLQGLGPTQEFWDNLEKETEGRLQEMSKDLE 60  
Db 1 MGHHHHHHDYDPTTENLYFGSTFSKRLQGLGPTQEFWDNLEKETEGRLQEMSKDLE 60  
  
Qy 61 EVKAKVQPYLDDFQKKWQEMELYRQKVEPLRAELQEGARQKLHELOKLSPLGEEMRDR 120  
Db 61 EVKAKVQPYLDDFQKKWQEMELYRQKVEPLRAELQEGARQKLHELOKLSPLGEEMRDR 120  
  
Qy 121 ARAHVDAIRTHLAPYSDELRLQRLAARLEALKENGARLAAYHAKATEHLSLSEKAKPAL 180  
Db 121 ARAHVDAIRTHLAPYSDELRLQRLAARLEALKENGARLAAYHAKATEHLSLSEKAKPAL 180  
  
Qy 181 EDLRQGLLPVLESFKVFSLSALEEYTKKLTQGT-----REQGLGPTQ 240  
Db 181 EDLRQGLLPVLESFKVFSLSALEEYTKKLTQGT-----REQGLGPTQ 223  
  
Qy 241 EFDNLEKETEGRLQEMSKDLEEVKAKVQPYLDDFQKKWQEMELYRQKVEPLRAELQEG 300  
Db 224 EFDNLEKETEGRLQEMSKDLEEVKAKVQPYLDDFQKKWQEMELYRQKVEPLRAELQEG 283  
  
Qy 301 ARQKLHELOKLSPLGEEMDRARAHVDALRTHLAPYSDELRLQRLAARLEALKENGARL 360  
Db 284 ARQKLHELOKLSPLGEEMDRARAHVDALRTHLAPYSDELRLQRLAARLEALKENGARL 343  
  
Qy 361 AEYHAKATEHLSLSEKAKPALEDRLQGLLPVLESFKVFSLSALEEYTKKLTQ 414  
Db 344 AEYHAKATEHLSLSEKAKPALEDRLQGLLPVLESFKVFSLSALEEYTKKLTQ 397

RESULT 14  
US-11-033-489-99  
; Sequence 99, Application US/11033489  
; Publication No. US20050182243A1  
; GENERAL INFORMATION:  
; APPLICANT: Sligar, Stephen G  
; APPLICANT: Bayburt, Timothy H  
; APPLICANT: Schuler, Mary A

; APPLICANT: Civjan, Natanya R  
; APPLICANT: Grinkova, Yelena V.  
; APPLICANT: Denisov, Iliya G.  
; APPLICANT: Grimme, Stephen G.  
; TITLE OF INVENTION: Membrane Scaffold Proteins  
; FILE REFERENCE: 87-00B  
; CURRENT APPLICATION NUMBER: US/11/033.489  
; CURRENT FILING DATE: 2005-01-11  
; PRIOR APPLICATION NUMBER: 09/990,087  
; PRIOR FILING DATE: 2001-11-20  
; PRIOR APPLICATION NUMBER: 10/465,789  
; PRIOR FILING DATE: 2003-06-18  
; PRIOR APPLICATION NUMBER: 60/536,281  
; PRIOR FILING DATE: 2004-01-13  
; PRIOR APPLICATION NUMBER: 60/252,233  
; PRIOR FILING DATE: 2000-11-20  
; NUMBER OF SEQ ID NOS: 136  
; SOFTWARE: Patent in version 3.3  
; SEQ ID NO 99  
; LENGTH: 392  
; TYPE: PRT  
; ORGANISM: Artificial  
; FEATURE:  
; OTHER INFORMATION: MSP2N2  
US-11-033-489-99

Query Match 89.5%; Score 1896; DB 6; Length 392;  
Best Local Similarity 91.3%; Pred. No. 1e-106;  
Matches 378; Conservative 3; Mismatches 11; Indels 22; Gaps 1;  
  
Qy 1 MGHHHHHIEGRLLKLLDNWDSVTSTFSKRLQGLGPTQEFWDNLEKETEGRLQEMSKDLE 60  
Db 1 MGHHHHHHDYDPTTENLYFGSTFSKRLQGLGPTQEFWDNLEKETEGRLQEMSKDLE 60  
  
Qy 61 EVKAKVQPYLDDFQKKWQEMELYRQKVEPLRAELQEGARQKLHELOKLSPLGEEMRDR 120  
Db 61 EVKAKVQPYLDDFQKKWQEMELYRQKVEPLRAELQEGARQKLHELOKLSPLGEEMRDR 120  
  
Qy 121 ARAHVDAIRTHLAPYSDELRLQRLAARLEALKENGARLAAYHAKATEHLSLSEKAKPAL 180  
Db 121 ARAHVDAIRTHLAPYSDELRLQRLAARLEALKENGARLAAYHAKATEHLSLSEKAKPAL 180  
  
Qy 181 EDLRQGLLPVLESFKVFSLSALEEYTKKLTQGT-----PVTQ 240  
Db 181 EDLRQGLLPVLESFKVFSLSALEEYTKKLTQGT-----PVTQ 218  
  
Qy 241 EFDNLEKETEGRLQEMSKDLEEVKAKVQPYLDDFQKKWQEMELYRQKVEPLRAELQEG 300  
Db 219 EFDNLEKETEGRLQEMSKDLEEVKAKVQPYLDDFQKKWQEMELYRQKVEPLRAELQEG 278  
  
Qy 301 ARQKLHELOKLSPLGEEMDRARAHVDALRTHLAPYSDELRLQRLAARLEALKENGARL 360  
Db 279 ARQKLHELOKLSPLGEEMDRARAHVDALRTHLAPYSDELRLQRLAARLEALKENGARL 338  
  
Qy 361 AEYHAKATEHLSLSEKAKPALEDRLQGLLPVLESFKVFSLSALEEYTKKLTQ 414  
Db 339 AEYHAKATEHLSLSEKAKPALEDRLQGLLPVLESFKVFSLSALEEYTKKLTQ 392

RESULT 15  
US-10-465-789A-86  
; Sequence 86, Application US/10465789A  
; Publication No. US20040053384A1  
; GENERAL INFORMATION:  
; APPLICANT: Sligar, Stephen G  
; APPLICANT: Bayburt, Timothy H  
; APPLICANT: Schuler, Mary A  
; APPLICANT: Civjan, Natanya R  
; APPLICANT: Yelena V. Grinkova  
; APPLICANT: Iliya G. Denisov  
; TITLE OF INVENTION: Membrane Scaffold Proteins  
; FILE REFERENCE: 87-00A  
; CURRENT APPLICATION NUMBER: US/10/465.789A

; CURRENT FILING DATE: 2003-06-18  
; PRIOR APPLICATION NUMBER: 09/990,087  
; PRIOR FILING DATE: 2001-11-20  
; PRIOR APPLICATION NUMBER: 60/252,233  
; PRIOR FILING DATE: 2000-11-20  
; NUMBER OF SEQ ID NOS: 89  
; SOFTWARE: PatentIn version 3.1  
; SEQ ID NO 86  
; LENGTH: 381  
; TYPE: PRT  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: His-tagged MSP2D1D1  
US-10-465-789A-86

Query Match 86.9%; Score 1839.5; DB 4; Length 381;  
Best Local Similarity 89.0%; Pred. No. 2.5e-103;  
Matches 371; Conservative 3; Mismatches 4; Indels 39; Gaps 4;  
  
Qy 1 MGHHHHHHIEGRLLKLLDNWDSVTSTFSKLRQL--GPVTQEFWDNLEKETEGLRQEMSK 57  
Db 1 MGHHHHHH-----HDYDIPPT-----ENLYFQGPVTQEFWDNLEKETEGLRQEMSK 46  
Qy 58 DLEEVKAKVQPYLDDFQKKQEMELYRQKVEPLRAELQEGARQKLHELQKLSPLGEEM 117  
Db 47 DLEEVKAKVQPYLDDFQKKQEMELYRQKVEPLRAELQEGARQKLHELQKLSPLGEEM 106  
Qy 118 RDRARAHVDALRTHLAPYSDELRLQRLAARLEALKENGARLAAYHAKATEHLSLSEKAK 177  
Db 107 RDRARAHVDALRTHLAPYSDELRLQRLAARLEALKENGARLAAYHAKATEHLSLSEKAK 166  
Qy 178 PALEDLRQGLLPVLESFKVSFLSALVEYTKKLTQGTGTLKLLDNWDSVTSTFSKLRQLGP 237  
Db 167 PALEDLRQGLLPVLESFKVSFLSALVEYTKKLTQGT-----P 204  
Qy 238 VTQEFWDNLEKETEGLRQEMSKDLEEVKAKVQPYLDDFQKKQEMELYRQKVEPLRAEL 297  
Db 205 VTQEFWDNLEKETEGLRQEMSKDLEEVKAKVQPYLDDFQKKQEMELYRQKVEPLRAEL 264  
Qy 298 QEGARQKLHELQKLSPLGEEMRDRARAHVDALRTHLAPYSDELRLQRLAARLEALKENG 357  
Db 265 QEGARQKLHELQKLSPLGEEMRDRARAHVDALRTHLAPYSDELRLQRLAARLEALKENG 324  
Qy 358 ARLAAYHAKATEHLSLSEKAKPALEDLRQGLLPVLESFKVSFLSALVEYTKKLTQ 414  
Db 325 ARLAAYHAKATEHLSLSEKAKPALEDLRQGLLPVLESFKVSFLSALVEYTKKLTQ 381

Search completed: December 4, 2005, 06:22:35  
Job time : 165 secs



GenCore version 5.1.6  
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OM protein - protein search, using sw model

Run on: December 4, 2005, 05:43:55 ; Search time 46 Seconds  
(without alignments)  
744.081 Million cell updates/sec

Title: US-09-990-087-17  
Perfect score: 2118  
Sequence: 1 MGHSHHHHIEGRKLKLDNWD.....SFKVSFLSALEYTKLNTQ 414

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 572060 seqs, 82675679 residues

Total number of hits satisfying chosen parameters: 572060

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : Issued Patents AA:\*  
1: /cgn2\_6/ptodata/1/iaa/5-COMB.pep:\*  
2: /cgn2\_6/ptodata/1/iaa/6-COMB.pep:\*  
3: /cgn2\_6/ptodata/1/iaa/H-COMB.pep:\*  
4: /cgn2\_6/ptodata/1/iaa/PCRTUS-COMB.pep:\*  
5: /cgn2\_6/ptodata/1/iaa/RE-COMB.pep:\*  
6: /cgn2\_6/ptodata/1/iaa/backfiles1.pep:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	1065	50.3	336	2	US-09-987-107-44
2	1063.5	50.2	337	2	US-09-987-107-46
3	1057	49.9	324	2	US-09-987-107-62
4	1056	49.9	316	2	US-09-987-107-48
5	1056	49.9	324	2	US-09-987-107-64
6	1051	49.6	316	2	US-09-987-107-54
7	1051	49.6	324	2	US-09-987-107-66
8	1049.5	49.6	323	2	US-09-987-107-58
9	1047.5	49.5	323	2	US-09-987-107-56
10	1045.5	49.4	323	2	US-09-987-107-60
11	1042	49.2	304	2	US-09-987-107-8
12	1041	49.2	304	2	US-09-987-107-7
13	1039.5	49.1	261	2	US-09-987-107-52
14	1038	49.0	304	2	US-09-987-107-6
15	1036.5	48.9	301	2	US-09-987-107-5
16	1036	48.9	306	2	US-09-987-107-9
17	1035.5	48.9	301	2	US-09-987-107-3
18	1034	48.8	306	2	US-09-987-107-11
19	1034	48.8	344	2	US-09-987-107-68
20	1033	48.8	306	2	US-09-987-107-10
21	1031.5	48.7	273	2	US-09-987-107-50
22	1029	48.6	258	2	US-09-987-107-4
23	1024	48.3	243	2	US-09-079-030-119
24	1024	48.3	243	2	US-09-987-107-1
25	1024	48.3	244	2	US-09-987-107-2
26	1024	48.3	267	1	US-07-959-946-3
27	1024	48.3	267	1	US-08-333-577-3

28	1024	48.3	267	2	US-08-952-796-2	Sequence 2, Appli
29	1024	48.3	267	2	US-08-940-136-260	Sequence 260, App
30	1024	48.3	267	2	US-10-283-599-260	Sequence 260, App
31	1024	48.3	267	2	US-09-987-107-15	Sequence 15, Appli
32	1024	48.3	267	4	PCT-US92-08634-3	Sequence 3, Appli
33	1024	48.3	329	2	US-09-987-107-14	Sequence 14, Appli
34	1017	48.0	264	1	US-08-448-606-6	Sequence 6, Appli
35	1008	47.6	267	2	US-09-919-039-27	Sequence 27, Appli
36	1006	47.5	200	2	US-08-952-796-15	Sequence 15, Appli
37	991.5	46.8	267	2	US-09-987-107-16	Sequence 16, Appli
38	860.5	40.5	266	2	US-09-987-107-19	Sequence 19, Appli
39	837	39.5	266	2	US-09-987-107-20	Sequence 20, Appli
40	814	38.4	265	2	US-09-987-107-18	Sequence 18, Appli
41	798	37.7	265	2	US-09-987-107-17	Sequence 17, Appli
42	701.5	33.1	265	2	US-09-987-107-21	Sequence 21, Appli
43	653	30.8	264	2	US-09-987-107-22	Sequence 22, Appli
44	614	29.0	241	2	US-09-987-107-24	Sequence 24, Appli
45	584	27.6	259	2	US-09-987-107-23	Sequence 23, Appli

ALIGNMENTS

RESULT 1  
US-09-987-107-44  
; Sequence 44, Application US/09987107  
; Patent No. 6897039  
; GENERAL INFORMATION:  
; APPLICANT: GRAVERSEN, Jonas  
; APPLICANT: MOESTRUP, Soren  
; TITLE OF INVENTION: APOLIPOPROTEINS ANALOGUES  
; FILE REFERENCE: GRAVERSENIA  
; CURRENT APPLICATION NUMBER: US/09/987,107  
; CURRENT FILING DATE: 2001-11-13  
; PRIOR APPLICATION NUMBER: US 60/264,022  
; PRIOR FILING DATE: 2001-01-26  
; PRIOR APPLICATION NUMBER: DK PA2001 00057  
; PRIOR FILING DATE: 2001-01-15  
; PRIOR APPLICATION NUMBER: DK PA2000 01682  
; PRIOR FILING DATE: 2000-11-10  
; NUMBER OF SEQ ID NOS: 91  
; SOFTWARE: Patentin version 3.1  
; SEQ ID NO 44  
; LENGTH: 336  
; TYPE: PRT  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: pT7 H6Ubifx Apo A-1 plasmid  
US-09-987-107-44

Query Match	50.3%	Score 1065;	DB 2;	Length 336;
Best Local Similarity	57.7%	Pred. No. 2.5e-69;		
Matches	240;	Conservative	27;	Mismatches 67;
				Indels 82; Gaps 7;
Qy	1	MGHSHHHHIEGRKLKLDNWDVSTFTSKLRQLQGVQTQEFWDNLEKETEGRQEMSKOLE	60	
Db	1	MGSHHHH-HG-----SQIFVKLTGTITLVEPSDTIE	34	
Qy	61	EVKAKVQPYLDDFOKKQWQEMELYRQKVEPLRAELQEGARQKLHLOEKLSPGCEMRDR	120	
Db	35	NVAKIQD-----KEGIPDQQLIFAGKLEDGRTLSDYNIQ-KESTLHLVLRLR	84	
Qy	121	ARAHVDALRTHLAPVS--DELQRQRLAARLEALKENGARLAAYHAKATEHLSTLSEKAKP	178	
Db	85	G-GSIEGGGDEPPQSPWDRVKDLATVYVDVKSGRDYVSQFEGSA-----	130	
Qy	179	ALEDRLQGLLPVLESFKVSFLSALEYTKLNTQGTLLKLDNWDVSTFTSKLRQLQGPV	238	
Db	131	-----LGKQLNLKLDNWDVSTFTSKLRQLQGPV	160	
Qy	239	TQEFWDNLEKETEGRQEMSKOLEEVKAKVQPYLDDFOKKQWQEMELYRQKVEPLRAELQ	298	
Db	161	TQEFWDNLEKETEGRQEMSKOLEEVKAKVQPYLDDFOKKQWQEMELYRQKVEPLRAELQ	220	

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QY 299 EGARQKHELOEKLSPGGEEMDRARAHVDALRTHLAPYSDLRQALAEALKEKNGGA 358
Db 221 EGARQKHELOEKLSPGGEEMDRARAHVDALRTHLAPYSDLRQALAEALKEKNGGA 280
QY 359 RLAEYHAKATEHLSTLSEKAKPALEDLRQGLLPVLESFKVSLSALEYTKKLNQ 414
Db 281 RLAEYHAKATEHLSTLSEKAKPALEDLRQGLLPVLESFKVSLSALEYTKKLNQ 336

RESULT 2
US-09-987-107-46
; Sequence 46, Application US/09987107
; Patent No. 6897039
; GENERAL INFORMATION:
; APPLICANT: GRAVERSEN, Jonas
; APPLICANT: MOESTRUP, Soren
; TITLE OF INVENTION: APOLIPOPROTEINS ANALOGUES
; FILE REFERENCE: GRAVERSENIA
; CURRENT APPLICATION NUMBER: US/09/987,107
; CURRENT FILING DATE: 2001-11-13
; PRIOR APPLICATION NUMBER: US 60/264,022
; PRIOR FILING DATE: 2001-01-26
; PRIOR APPLICATION NUMBER: DK PA2001 00057
; PRIOR FILING DATE: 2001-01-15
; PRIOR APPLICATION NUMBER: DK PA2000 01682
; PRIOR FILING DATE: 2000-11-10
; NUMBER OF SEQ ID NOS: 91
; SOFTWARE: Patent in version 3.1
; SEQ ID NO 46
; LENGTH: 337
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: T7 H6UbfX Cys-Apo A-1 plasmid
US-09-987-107-46

Query Match 50.2%; Score 1063.5; DB 2; Length 337;
Best Local Similarity 57.5%; Pred. No. 3.2e-69;
Matches 242; Conservative 25; Mismatches 63; Indels 91; Gaps 8;

QY 1 MGHSHHHHIEGRKLKLLDNWDSVTSTFSKRLQGLPVTQEFWDNLEKETEGLRQMSKDL 60
Db 1 MGSHHHH-HG-----SQIFVKTLTGKTLILEVPSDTIE 34
QY 61 EVKAKVQPYLDDFOKKQOEEMELYRQKVEPLRAELQEGARQKHELOEKLSPGGEEMDR 120
Db 35 NVKAKIQD-----KEGIPPPQORLI FAGKQLEDGRTLS DYNIQ-KESTLHLVRLR 84
QY 121 -----ARAHVDALRTHLAPYS--DELQRQLAARLEALKENGARLAELYHAKATEHLSTLS 173
Db 85 GGSIEGRGGCDE-----PPQSPWDRVKDLATVYVDVLKDSGRDYVSQFEGSA----- 131
QY 174 EKAKPALEDLRQGLLPVLESFKVSLSALEYTKKLNQGTGLKLLDNWDSVTSTFSKLRE 233
Db 132 -----LGKQLNLKLLDNWDSVTSTFSKLRE 156
QY 234 QLGPVTQEFWDNLEKETEGLRQMSKDL EEVAKVQPYLDDFOKKQOEEMELYRQKVEPL 293
Db 157 QLGPVTQEFWDNLEKETEGLRQMSKDL EEVAKVQPYLDDFOKKQOEEMELYRQKVEPL 216
QY 294 RAELOEGARQKHELOEKLSPGGEEMDRARAHVDALRTHLAPYSDLRQALAEALKE 353
Db 217 RAELOEGARQKHELOEKLSPGGEEMDRARAHVDALRTHLAPYSDLRQALAEALKE 276
QY 354 ENGGRALAEYHAKATEHLSTLSEKAKPALEDLRQGLLPVLESFKVSLSALEYTKKLN 413
Db 277 ENGGRALAEYHAKATEHLSTLSEKAKPALEDLRQGLLPVLESFKVSLSALEYTKKLN 336
QY 414 Q 414
Db 337 Q 337
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RESULT 3
US-09-987-107-62
; Sequence 62, Application US/09987107
; Patent No. 6897039
; GENERAL INFORMATION:
; APPLICANT: GRAVERSEN, Jonas
; APPLICANT: MOESTRUP, Soren
; TITLE OF INVENTION: APOLIPOPROTEINS ANALOGUES
; FILE REFERENCE: GRAVERSENIA
; CURRENT APPLICATION NUMBER: US/09/987,107
; CURRENT FILING DATE: 2001-11-13
; PRIOR APPLICATION NUMBER: US 60/264,022
; PRIOR FILING DATE: 2001-01-26
; PRIOR APPLICATION NUMBER: DK PA2001 00057
; PRIOR FILING DATE: 2001-01-15
; PRIOR APPLICATION NUMBER: DK PA2000 01682
; PRIOR FILING DATE: 2000-11-10
; NUMBER OF SEQ ID NOS: 91
; SOFTWARE: Patent in version 3.1
; SEQ ID NO 62
; LENGTH: 324
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: pT7H6 (GS)3 Trip-A-Tn-Apo A1 AmpR plasmid
US-09-987-107-62

Query Match 49.9%; Score 1057; DB 2; Length 324;
Best Local Similarity 56.3%; Pred. No. 8.9e-69;
Matches 238; Conservative 33; Mismatches 44; Indels 108; Gaps 11;

QY 1 MGHSHHHH-----TEGRKLKLLDNWDSVTSTFSKRLQGLPVTQEFWDNLEKETEGLRQ 53
Db 1 MGSHHHHHGGSGSGSIQGRSPGTE-----PPTQK-----PKKIVNAKK 38
QY 54 EM--SKDLEEVKAKVQPYLDDFOKKQOEEMELYRQKVEPLRAELQEGARQKHELOEKL 111
Db 39 DVNTNQMFEELKSR----LDTL-----AQEVALIKEQ-QALQTVSLKGS--KVMKKEPPQS 87
QY 112 PLGGEEMDRARAHVDALRTHLAPYSDLRQALAEALKEKENGARLAELYHAKATEHLST 171
Db 88 P-WDRVKDLATVYVD-----VLKDSGRDYVSQFEGSA----- 118
QY 172 LSEKAKPALEDLRQGLLPVLESFKVSLSALEYTKKLNQGTGLKLLDNWDSVTSTFSKL 231
Db 119 -----LGKQLNLKLLDNWDSVTSTFSKL 141
QY 232 REQLGPVTQEFWDNLEKETEGLRQMSKDL EEVAKVQPYLDDFOKKQOEEMELYRQKVE 291
Db 142 REQLGPVTQEFWDNLEKETEGLRQMSKDL EEVAKVQPYLDDFOKKQOEEMELYRQKVE 201
QY 292 PLRAELOEGARQKHELOEKLSPGGEEMDRARAHVDALRTHLAPYSDLRQALAEALKE 351
Db 202 PLRAELOEGARQKHELOEKLSPGGEEMDRARAHVDALRTHLAPYSDLRQALAEALKE 261
QY 352 LKENGARLAELYHAKATEHLSTLSEKAKPALEDLRQGLLPVLESFKVSLSALEYTKL 411
Db 262 LKENGARLAELYHAKATEHLSTLSEKAKPALEDLRQGLLPVLESFKVSLSALEYTKL 321
QY 412 NTQ 414
Db 322 NTQ 324

RESULT 4
US-09-987-107-48
; Sequence 48, Application US/09987107
; Patent No. 6897039
; GENERAL INFORMATION:
; APPLICANT: GRAVERSEN, Jonas
; APPLICANT: MOESTRUP, Soren
; TITLE OF INVENTION: APOLIPOPROTEINS ANALOGUES
```

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; FILE REFERENCE: GRAVERSENIA
; CURRENT APPLICATION NUMBER: US/09/987,107
; CURRENT FILING DATE: 2001-11-13
; PRIOR APPLICATION NUMBER: US 60/264,022
; PRIOR FILING DATE: 2001-01-26
; PRIOR APPLICATION NUMBER: DK PA2001 00057
; PRIOR FILING DATE: 2001-01-15
; PRIOR APPLICATION NUMBER: DK PA2000 01682
; PRIOR FILING DATE: 2000-11-10
; NUMBER OF SEQ ID NOS: 91
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 48
; LENGTH: 316
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: pT7 H6 Trip-A-Apo A-1 - AmpR plasmid
US-09-987-107-48

Query Match          49.9%; Score 1056; DB 2; Length 316;
Best Local Similarity 54.4%; Pred. No. 1e-68;
Matches 234; Conservative 25; Mismatches 41; Indels 130; Gaps 8;

Qy 1 MGHHHHH---IEGR-----LKLDNDWDSVTST--FSKUREQLGPVTQEFWNL 44
Db 1 MGSHHHHHSGISQGRSPGTEPTQPKKIVNAKDVNTKMFELKSR-----DTL 52
Qy 45 EKETGLRQEMSKDLEEVKAKVQPYLDDFQKKWQEMELYRQKVEPLRAELQEGARQKLH 104
Db 53 AOEVALLEQEQALQTVSLKGSDEPP-----QSPM-----81
Qy 105 ELQEKLSPLGEEMRDRAHVDALRTHLAPYSDELQRLAARLEALKENGARLAHYHAK 164
Db 82 -----DRVKDLATVYVD-----VLKSGRDYVSQFEGS 109
Qy 165 ATEHLSTLSEKAPALEDLRQGLLPVLESFKVSLSELYTKKINTQGTLLKLDNDWDSV 224
Db 110 A-----LQKQLNLKLDNDWDSV 126
Qy 225 TSTFSKLREQLGPVTQEFWNLKEKETEGRLQEMSKDLEEVKAKVQPYLDDFQKKWQEME 284
Db 127 TSTFSKLREQLGPVTQEFWNLKEKETEGRLQEMSKDLEEVKAKVQPYLDDFQKKWQEME 186
Qy 285 LYRQKVEPLRAELQEGARQKLHELOEKLSPGLGEEMRDRAHVDALRTHLAPYSDELQRL 344
Db 187 LYRQKVEPLRAELQEGARQKLHELOEKLSPGLGEEMRDRAHVDALRTHLAPYSDELQRL 246
Qy 345 LAARLEALKENGARLAHYHAKATEHLSLSEKAPALEDLRQGLLPVLESFKVSLSELYTKK 404
Db 247 LAARLEALKENGARLAHYHAKATEHLSLSEKAPALEDLRQGLLPVLESFKVSLSELYTKK 306
Qy 405 EYTKKLNQ 414
Db 307 EYTKKLNQ 316

RESULT 5
US-09-987-107-64
; Sequence 64, Application US/09987107
; Patent No. 6897039
; GENERAL INFORMATION:
; APPLICANT: GRAVERSEN, Jonas
; APPLICANT: MOESTRUP, Soren
; TITLE OF INVENTION: APOLIPOPROTEINS ANALOGUES
; FILE REFERENCE: GRAVERSENIA
; CURRENT APPLICATION NUMBER: US/09/987,107
; CURRENT FILING DATE: 2001-11-13
; PRIOR APPLICATION NUMBER: US 60/264,022
; PRIOR FILING DATE: 2001-01-26
; PRIOR APPLICATION NUMBER: DK PA2001 00057
; PRIOR FILING DATE: 2000-11-10
; NUMBER OF SEQ ID NOS: 91
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 54
; LENGTH: 316
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: pT7H6 Trip-A-Apo A1 K9A K15A - AmpR plasmid
US-09-987-107-54

; NUMBER OF SEQ ID NOS: 91
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 64
; LENGTH: 324
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: pT7H6 Trip-A-Tn-Apo A1-final - AmpR plasmid
US-09-987-107-64

Query Match          49.9%; Score 1056; DB 2; Length 324;
Best Local Similarity 56.3%; Pred. No. 1.1e-68;
Matches 238; Conservative 32; Mismatches 45; Indels 108; Gaps 11;

Qy 1 MGHHHHH-----IEGRKLKLDNDWDSVTSTFSKLREQLGPVTQEFWNLKEKETEGRLQ 53
Db 1 MGSHHHHHSGSGSIQGRSPGTE-----PPTQK-----PKKIVNAKK 38
Qy 54 EM--SKDLEEVKAKVQPYLDDFQKKWQEMELYRQKVEPLRAELQEGARQKLHELOEKL 111
Db 39 DVNTKMFELKSR-----LDTL-----AQEVALLEQEQ-QALQTVSLKGT--KVMKPEPPQS 87
Qy 112 PLGEEMRDRAHVDALRTHLAPYSDELQRLAARLEALKENGARLAHYHAKATEHLSL 171
Db 88 P-WDRVKDLATVYVD-----VLKSGRDYVSQFEGSA-----118
Qy 172 LSEKAPALEDLRQGLLPVLESFKVSLSELYTKKINTQGTLLKLDNDWDSVTSTFSKL 231
Db 119 -----LQKQLNLKLDNDWDSVTSTFSKL 141
Qy 232 REQLGPVTQEFWNLKEKETEGRLQEMSKDLEEVKAKVQPYLDDFQKKWQEMELYRQKVE 291
Db 142 REQLGPVTQEFWNLKEKETEGRLQEMSKDLEEVKAKVQPYLDDFQKKWQEMELYRQKVE 201
Qy 292 PLRAELQEGARQKLHELOEKLSPGLGEEMRDRAHVDALRTHLAPYSDELQRLAARLEA 351
Db 202 PLRAELQEGARQKLHELOEKLSPGLGEEMRDRAHVDALRTHLAPYSDELQRLAARLEA 261
Qy 352 LKENGARLAHYHAKATEHLSLSEKAPALEDLRQGLLPVLESFKVSLSELYTKK 411
Db 262 LKENGARLAHYHAKATEHLSLSEKAPALEDLRQGLLPVLESFKVSLSELYTKK 321
Qy 412 NTQ 414
Db 322 NTQ 324

RESULT 6
US-09-987-107-54
; Sequence 54, Application US/09987107
; Patent No. 6897039
; GENERAL INFORMATION:
; APPLICANT: GRAVERSEN, Jonas
; APPLICANT: MOESTRUP, Soren
; TITLE OF INVENTION: APOLIPOPROTEINS ANALOGUES
; FILE REFERENCE: GRAVERSENIA
; CURRENT APPLICATION NUMBER: US/09/987,107
; CURRENT FILING DATE: 2001-11-13
; PRIOR APPLICATION NUMBER: US 60/264,022
; PRIOR FILING DATE: 2001-01-26
; PRIOR APPLICATION NUMBER: DK PA2001 00057
; PRIOR FILING DATE: 2001-01-15
; PRIOR APPLICATION NUMBER: DK PA2000 01682
; PRIOR FILING DATE: 2000-11-10
; NUMBER OF SEQ ID NOS: 91
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 54
; LENGTH: 316
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: pT7H6 Trip-A-Apo A1 K9A K15A - AmpR plasmid
US-09-987-107-54
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Query Match 49.6%; Score 1051; DB 2; Length 316;  
Best Local Similarity 54.9%; Pred. No. 2.3e-68;  
Matches 236; Conservative 22; Mismatches 42; Indels 130; Gaps 9;

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Qy 1 MGHHHHH---IEGRLL-----KLLDN--WDSV--TSTFSKRLRQLGPTQEFWDNL 44
Db 1 MGSHHHHHSGSIQGRSPCTEPTQKPAIYNKADVVNTKMFELKSRLL-----DTL 52
Qy 45 EKETEGRLRQEMSKDLEEVKAKVQPYLDDFQKKQWQEMELYRQKVEPLRAELQEGARQKLH 104
Db 53 AQEVALLEQQAQVLSLKSDEPP-----QSPW----- 81
Qy 105 ELQEKLSPLGEMDRARAHVDALRTHLAPYSDELRLQRLAARLEALKENGARLAAYHAK 164
Db 82 -----DRVKDLATVYVD-----VLKDSGRDYVSQFEGS 109
Qy 165 ATEHLSLSEKAKPALEDLROGLLPVLESFKVSFLSALSEYTKKLNTOGTLKLLDNWDSV 224
Db 110 A-----LQKQLNLKLLDNWDSV 126
Qy 225 TSTFSKRLRQLGPTQEFWDNLEKETEGRLRQEMSKDLEEVKAKVQPYLDDFQKKQWQEME 284
Db 127 TSTFSKRLRQLGPTQEFWDNLEKETEGRLRQEMSKDLEEVKAKVQPYLDDFQKKQWQEME 186
Qy 285 LYRQKVPRLAELQEGARQKLHLEQKLSPLGEMDRARAHVDALRTHLAPYSDELRLQ 344
Db 187 LYRQKVPRLAELQEGARQKLHLEQKLSPLGEMDRARAHVDALRTHLAPYSDELRLQ 246
Qy 345 LAARLEALKENGARLAAYHAKATEHLSLSEKAKPALEDLROGLLPVLESFKVSFLSAL 404
Db 247 LAARLEALKENGARLAAYHAKATEHLSLSEKAKPALEDLROGLLPVLESFKVSFLSAL 306
Qy 405 EYTKKLNTO 414
Db 307 EYTKKLNTO 316
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## RESULT 7

US-09-987-107-66  
; Sequence 66, Application US/09987107  
; Patent No. 6897039  
; GENERAL INFORMATION:  
; APPLICANT: GRAVERSEN, Jonas  
; APPLICANT: MOESTRUP, Soren  
; TITLE OF INVENTION: APOLIPOPROTEINS ANALOGUES  
; FILE REFERENCE: GRAVERSEN1A  
; CURRENT APPLICATION NUMBER: US/09/987,107  
; CURRENT FILING DATE: 2001-11-13  
; PRIOR FILING DATE: 2001-01-26  
; PRIOR APPLICATION NUMBER: US 60/264,022  
; PRIOR FILING DATE: 2001-01-26  
; PRIOR APPLICATION NUMBER: DK PA2001 00057  
; PRIOR FILING DATE: 2001-01-15  
; PRIOR APPLICATION NUMBER: DK PA2000 01682  
; PRIOR FILING DATE: 2000-11-10  
; NUMBER OF SEQ ID NOS: 91  
; SOFTWARE: PatentIn version 3.1  
; SEQ ID NO 66  
; LENGTH: 324  
; TYPE: PRT  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: p7H6 Trip-A-Tn-Apo A1 final K9AK15A - AmpR plasmid  
US-09-987-107-66

Query Match 49.6%; Score 1051; DB 2; Length 324;  
Best Local Similarity 56.3%; Pred. No. 2.4e-68;  
Matches 238; Conservative 30; Mismatches 47; Indels 108; Gaps 11;

```
Qy 1 MGHHHHH-----IGRLKLLDNWDSVTSTFSKRLRQLGPTQEFWDNLEKETEGRLQ 53
Db 1 MGSHHHHHSGSGSIQGRSPGTE-----PPTQK-----PKAIVNAKA 38
```

```
Qy 54 EM--SKDLEEVKAKVQPYLDDFQKKQWQEMELYRQKVEPLRAELQEGARQKLHLEQKLS 111
Db 39 DVVNTKMFELKSR-----LDTL-----AQEVALLEQ-QALQTVSLKGT--KVHMKEPQS 87
Qy 112 PLGEMDRARAHVDALRTHLAPYSDELRLQRLAARLEALKENGARLAAYHAKATEHLS 171
Db 88 P-MDRVKDLATVYVD-----VLKDSGRDYVSQFEGSA----- 118
Qy 172 LSEKAKPALEDLROGLLPVLESFKVSFLSALSEYTKKLNTOGTLKLLDNWDSVTSTFSKL 231
Db 119 -----LGKQLNLKLLDNWDSVTSTFSKL 141
Qy 232 REQLGPTQEFWDNLEKETEGRLRQEMSKDLEEVKAKVQPYLDDFQKKQWQEMELYRQKVE 291
Db 142 REQLGPTQEFWDNLEKETEGRLRQEMSKDLEEVKAKVQPYLDDFQKKQWQEMELYRQKVE 201
Qy 292 PLRAELQEGARQKLHLEQKLSPLGEMDRARAHVDALRTHLAPYSDELRLQRLAARLEA 351
Db 202 PLRAELQEGARQKLHLEQKLSPLGEMDRARAHVDALRTHLAPYSDELRLQRLAARLEA 261
Qy 352 LKENGARLAAYHAKATEHLSLSEKAKPALEDLROGLLPVLESFKVSFLSALSEYTKKL 411
Db 262 LKENGARLAAYHAKATEHLSLSEKAKPALEDLROGLLPVLESFKVSFLSALSEYTKKL 321
Qy 412 NTQ 414
Db 322 NTQ 324
```

## RESULT 8

US-09-987-107-58  
; Sequence 58, Application US/09987107  
; Patent No. 6897039  
; GENERAL INFORMATION:  
; APPLICANT: GRAVERSEN, Jonas  
; APPLICANT: MOESTRUP, Soren  
; TITLE OF INVENTION: APOLIPOPROTEINS ANALOGUES  
; FILE REFERENCE: GRAVERSEN1A  
; CURRENT APPLICATION NUMBER: US/09/987,107  
; CURRENT FILING DATE: 2001-11-13  
; PRIOR FILING DATE: 2001-01-26  
; PRIOR APPLICATION NUMBER: US 60/264,022  
; PRIOR FILING DATE: 2001-01-26  
; PRIOR APPLICATION NUMBER: DK PA2001 00057  
; PRIOR FILING DATE: 2001-01-15  
; PRIOR APPLICATION NUMBER: DK PA2000 01682  
; PRIOR FILING DATE: 2000-11-10  
; NUMBER OF SEQ ID NOS: 91  
; SOFTWARE: PatentIn version 3.1  
; SEQ ID NO 58  
; LENGTH: 323  
; TYPE: PRT  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: p7H6 Trip-A-Fn-Apo A1-final - AmpR plasmid  
US-09-987-107-58

Query Match 49.6%; Score 1049.5; DB 2; Length 323;  
Best Local Similarity 56.4%; Pred. No. 3.1e-68;  
Matches 235; Conservative 24; Mismatches 61; Indels 97; Gaps 8;

```
Qy 1 MG-HHHHHHIEGRLLKLLDNWDSVTSTFSKRLRQLGPTQEFWDNLEKETEGRLRQEMSKDL 59
Db 1 MGSHHHHHSGSGS-----GSIQGRSPGTEPTQPK 31
Qy 60 EEVKAQVQPYLDDFQKKQWQEMELYRQKVEPLRAELQEGARQKLHLEQKLSPLGEMDR 119
Db 32 KIVNAK-----KDVVNTKMFEL---KSRLDTL---AQEVALLEQQAQVLSLKGTSQD 81
Qy 120 RARAHVDALRTHLAPYS--DELRLQRLAARLEALKENGARLAAYHAKATEHLSLSEKAK 177
Db 82 E-----PPOSPMDVRKDLATVYVDVLKDSGRDYVSQFEGSA----- 117
Qy 178 PALEDLROGLLPVLESFKVSFLSALSEYTKKLNTOGTLKLLDNWDSVTSTFSKRLRQLG 237
```

Db 118 -----LGRQLNLKLLDNWDSVTSTFSKLRQLGP 146

Qy 238 VTQFWDNLEKETEGRLQEMSKDLEEVKAKVQPYLDLDFQKKQWEMELYRQKVEPLRAEL 297

Db 147 VTQFWDNLEKETEGRLQEMSKDLEEVKAKVQPYLDLDFQKKQWEMELYRQKVEPLRAEL 206

Qy 298 QEGARQKLHELOEKLSPIDGEEMRDRARAHVDALRTHLAPYSDELQRQRLAARLEALKENG 357

Db 207 QEGARQKLHELOEKLSPIDGEEMRDRARAHVDALRTHLAPYSDELQRQRLAARLEALKENG 266

Qy 358 ARLAHYHAKATEHLSLSTSEKAPALEDLRQGLLPVLESFKVSFLSALAEYTKLNTQ 414

Db 267 ARLAHYHAKATEHLSLSTSEKAPALEDLRQGLLPVLESFKVSFLSALAEYTKLNTQ 323

RESULT 9

US-09-987-107-56

; Sequence 56, Application US/09987107

; Patent No. 6897039

; GENERAL INFORMATION:

; APPLICANT: GRAVERSEN, Jonas

; APPLICANT: MOESTRUP, Soren

; TITLE OF INVENTION: APOLIPOPROTEINS ANALOGUES

; FILE REFERENCE: GRAVERSENIA

; CURRENT APPLICATION NUMBER: US/09/987,107

; CURRENT FILING DATE: 2001-11-13

; PRIOR APPLICATION NUMBER: DK PA2001 00057

; PRIOR FILING DATE: 2001-01-26

; PRIOR APPLICATION NUMBER: DK PA2000 01682

; PRIOR FILING DATE: 2000-11-10

; NUMBER OF SEQ ID NOS: 91

; SOFTWARE: PatentIn version 3.1

; SEQ ID NO 56

; LENGTH: 323

; TYPE: PRT

; ORGANISM: Artificial Sequence

; FEATURE:

; OTHER INFORMATION: p7H6 Trip-A-Fn-Apo A1 - AmpR plasmid

US-09-987-107-56

Query Match 49.5%; Score 1047.5; DB 2; Length 323;

Best Local Similarity 56.4%; Pred. No. 4.3e-68;

Matches 235; Conservative 23; Mismatches 62; Indels 97; Gaps 8;

Qy 1 MG-HHHHHHIEGRKLKLLDNWDSVTSTFSKLRQLGPVTQFWDNLEKETEGRLQEMSKDL 59

Db 1 MGSHHHHHHSGS-----GSIQGRSPGTEPPTQPK 31

Qy 60 BEVAKVQPYLDLDFQKKQWEMELYRQKVEPLRAELQEGARQKLHELOEKLSPIDGEEMRD 119

Db 32 KIVNAK----KDVNTKMFEL---KSLDLTL---AQEVALLKEQALQTVLSLKGSGHD 81

Qy 120 RARAHVDALRTHLAPYS--DELQRQRLAARLEALKENGARLAHYHAKATEHLSLSEKAK 177

Db 82 E-----PQSPFWRVKDLATVYVDVKDSGRDYSQFESA----- 117

Qy 178 PALEDLROGLLPVLESFKVSFLSALAEYTKLNTQGLTKLLDNWDSVTSTFSKLRQLGP 237

Db 118 -----LGRQLNLKLLDNWDSVTSTFSKLRQLGP 146

Qy 238 VTQFWDNLEKETEGRLQEMSKDLEEVKAKVQPYLDLDFQKKQWEMELYRQKVEPLRAEL 297

Db 147 VTQFWDNLEKETEGRLQEMSKDLEEVKAKVQPYLDLDFQKKQWEMELYRQKVEPLRAEL 206

Qy 298 QEGARQKLHELOEKLSPIDGEEMRDRARAHVDALRTHLAPYSDELQRQRLAARLEALKENG 357

Db 207 QEGARQKLHELOEKLSPIDGEEMRDRARAHVDALRTHLAPYSDELQRQRLAARLEALKENG 266

Qy 358 ARLAHYHAKATEHLSLSTSEKAPALEDLRQGLLPVLESFKVSFLSALAEYTKLNTQ 414

Db 267 ARLAHYHAKATEHLSLSTSEKAPALEDLRQGLLPVLESFKVSFLSALAEYTKLNTQ 323

RESULT 10

US-09-987-107-60

; Sequence 60, Application US/09987107

; Patent No. 6897039

; GENERAL INFORMATION:

; APPLICANT: GRAVERSEN, Jonas

; APPLICANT: MOESTRUP, Soren

; TITLE OF INVENTION: APOLIPOPROTEINS ANALOGUES

; FILE REFERENCE: GRAVERSENIA

; CURRENT APPLICATION NUMBER: US/09/987,107

; CURRENT FILING DATE: 2001-11-13

; PRIOR APPLICATION NUMBER: US 60/264,022

; PRIOR FILING DATE: 2001-01-26

; PRIOR APPLICATION NUMBER: DK PA2001 00057

; PRIOR FILING DATE: 2001-01-15

; PRIOR APPLICATION NUMBER: DK PA2000 01682

; PRIOR FILING DATE: 2000-11-10

; NUMBER OF SEQ ID NOS: 91

; SOFTWARE: PatentIn version 3.1

; SEQ ID NO 60

; LENGTH: 323

; TYPE: PRT

; ORGANISM: Artificial Sequence

; FEATURE:

; OTHER INFORMATION: p7H6 Trip-A-Fn-Apo A1 final K9AK15A - AmpR plasmid

US-09-987-107-60

Query Match 49.4%; Score 1045.5; DB 2; Length 323;

Best Local Similarity 72.9%; Pred. No. 6e-68;

Matches 226; Conservative 19; Mismatches 53; Indels 12; Gaps 4;

Qy 111 SPIDGEEMRDRARAHVDALRTHLAPYSDELQRQRLAARLEALKENGARLAHYHAKATEHLS 170

Db 20 SPGTEPPTQPKAIVNAKADV---NTKMFELKSLRDLTLAQE-VALLKEQALQTVSLK 75

Qy 171 TLSEKAKP-----ALEDLRQGLLPVLESFKVSFLSALAEYTKLNTQGLTKLLDNWDSV 224

Db 76 GTSGDEFPQSPWDRVKDLATVYVDVKDSGRDYSQFE--GSALGRQLNLKLLDNWDSV 133

Qy 225 TSTFSKLRQLGPVTQFWDNLEKETEGRLQEMSKDLEEVKAKVQPYLDLDFQKKQWEME 284

Db 134 TSTFSKLRQLGPVTQFWDNLEKETEGRLQEMSKDLEEVKAKVQPYLDLDFQKKQWEME 193

Qy 285 LYRQKVEPLRAELOEGARQKLHELOEKLSPIDGEEMRDRARAHVDALRTHLAPYSDELQR 344

Db 194 LYRQKVEPLRAELOEGARQKLHELOEKLSPIDGEEMRDRARAHVDALRTHLAPYSDELQR 253

Qy 345 LAARLEALKENGARLAHYHAKATEHLSLSTSEKAPALEDLRQGLLPVLESFKVSFLSAL 404

Db 254 LAARLEALKENGARLAHYHAKATEHLSLSTSEKAPALEDLRQGLLPVLESFKVSFLSAL 313

Qy 405 EYTKLNTQ 414

Db 314 EYTKLNTQ 323

RESULT 11

US-09-987-107-8

; Sequence 8, Application US/09987107

; Patent No. 6897039

; GENERAL INFORMATION:

; APPLICANT: GRAVERSEN, Jonas

; APPLICANT: MOESTRUP, Soren

; TITLE OF INVENTION: APOLIPOPROTEINS ANALOGUES

; FILE REFERENCE: GRAVERSENIA

; CURRENT APPLICATION NUMBER: US/09/987,107

; CURRENT FILING DATE: 2001-11-13

; PRIOR APPLICATION NUMBER: US 60/264,022

; PRIOR FILING DATE: 2001-01-26

; PRIOR APPLICATION NUMBER: DK PA2001 00057

```
; PRIOR FILING DATE: 2001-01-15
; PRIOR APPLICATION NUMBER: DK PA2000 01682
; PRIOR FILING DATE: 2000-11-10
; NUMBER OF SEQ ID NOS: 91
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 8
; LENGTH: 304
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(56)
; OTHER INFORMATION: Trimerisation module from tetranectin
; NAME/KEY: misc feature
; LOCATION: (13)..(13)
; OTHER INFORMATION: Mutagen
; NAME/KEY: misc feature
; LOCATION: (19)..(19)
; OTHER INFORMATION: Mutagen
; NAME/KEY: misc feature
; LOCATION: (62)..(304)
; OTHER INFORMATION: Mature Apo A1
; US-09-987-107-8

Query Match          49.2%; Score 1042; DB 2; Length 304;
Best Local Similarity 72.9%; Pred. No. 1e-67;
Matches 226; Conservative 19; Mismatches 53; Indels 12; Gaps 4;

Qy 111 SPLGEEMDRARAHVDALRTHLAPYSDELRLQRLAARLEALKENGARLAAYHAKATEHLS 170
||| : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
D5 1 SPGTQPKPKAIKADVV---NTKMFELKSRDLDTLAQE-VALLKEQQAALQTVSLK 56
||| : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :

Qy 171 TLSEKAKP-----ALEDLRQGLLPVLESFKVSFLSALAEYTKKLTQGTILKLLDNWDSV 224
||| : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
D5 57 GTSGQDEPPQSPWDRVKDLATVYVDVLKDSGRDYSQFE--GSALGKQLNLKLLDNWDSV 114
||| : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :

Qy 225 TSTFSKLEQLGPVTQBFWDNLEKETEGLRQEMSKDLEEVKAKVQPYLDLDFQKKWQEME 284
||| : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
D5 115 TSTFSKLEQLGPVTQBFWDNLEKETEGLRQEMSKDLEEVKAKVQPYLDLDFQKKWQEME 174
||| : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :

Qy 285 LYRKQVEPLRAELQEGARQKLHELOEKLSPIGEEMDRARAHVDALRTHLAPYSDELRLQ 344
||| : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
D5 175 LYRKQVEPLRAELQEGARQKLHELOEKLSPIGEEMDRARAHVDALRTHLAPYSDELRLQ 234
||| : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :

Qy 345 LAARLEALKENGARLAAYHAKATEHLSLSEKAKPALEDLROGLLPVLESFKVSFLSAL 404
||| : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
D5 235 LAARLEALKENGARLAAYHAKATEHLSLSEKAKPALEDLROGLLPVLESFKVSFLSAL 294
||| : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :

Qy 405 EYTKKLTNQ 414
||| : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
D5 295 EYTKKLTNQ 304
||| : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :

RESULT 12
US-09-987-107-7
; Sequence 7, Application US/09987107
; Patent No. 6897039
; GENERAL INFORMATION:
; APPLICANT: GRAVERSEN, Jonas
; APPLICANT: MOESTRUP, Soren
; TITLE OF INVENTION: APOLIPOPROTEINS ANALOGUES
; FILE REFERENCE: GRAVERSENIA
; CURRENT APPLICATION NUMBER: US/09/987,107
; PRIOR FILING DATE: 2001-11-13
; PRIOR APPLICATION NUMBER: US 60/264,022
; PRIOR FILING DATE: 2001-01-26
; PRIOR APPLICATION NUMBER: DK PA2001 00057
; PRIOR FILING DATE: 2001-01-15
; PRIOR APPLICATION NUMBER: DK PA2000 01682
; PRIOR FILING DATE: 2000-11-10
; NUMBER OF SEQ ID NOS: 91
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 7

Query Match          49.1%; Score 1039.5; DB 2; Length 261;
Best Local Similarity 80.8%; Pred. No. 1.3e-67;
```

```
; LENGTH: 304
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(56)
; OTHER INFORMATION: Trimerisation module from tetranectin
; NAME/KEY: misc feature
; LOCATION: (57)..(61)
; OTHER INFORMATION: Fibronectin based linker
; NAME/KEY: misc feature
; LOCATION: (62)..(304)
; OTHER INFORMATION: Mature Apo A1
; US-09-987-107-7

Query Match          49.2%; Score 1041; DB 2; Length 304;
Best Local Similarity 72.5%; Pred. No. 1.2e-67;
Matches 224; Conservative 18; Mismatches 51; Indels 16; Gaps 4;

Qy 112 PLGEEMDRARAHVDALRTHLAPYSDELRLQRLAARLEALKENGARLAAYHAKATEHLS 171
||| : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
D5 6 PPTQPKPKIYNAKDVVNT-----KMFELKSRDLDTLAQE-VALLKEQQAALQTVSLK 57
||| : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :

Qy 172 LSEKAKP-----ALEDLRQGLLPVLESFKVSFLSALAEYTKKLTQGTILKLLDNWDSV 225
||| : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
D5 58 TSQDEPPQSPWDRVKDLATVYVDVLKDSGRDYSQFE--GSALGKQLNLKLLDNWDSV 115
||| : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :

Qy 226 TSTFSKLEQLGPVTQBFWDNLEKETEGLRQEMSKDLEEVKAKVQPYLDLDFQKKWQEME 285
||| : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
D5 116 TSTFSKLEQLGPVTQBFWDNLEKETEGLRQEMSKDLEEVKAKVQPYLDLDFQKKWQEME 175
||| : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :

Qy 286 YRKQVEPLRAELQEGARQKLHELOEKLSPIGEEMDRARAHVDALRTHLAPYSDELRLQ 345
||| : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
D5 176 YRKQVEPLRAELQEGARQKLHELOEKLSPIGEEMDRARAHVDALRTHLAPYSDELRLQ 235
||| : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :

Qy 346 AARLEALKENGARLAAYHAKATEHLSLSEKAKPALEDLROGLLPVLESFKVSFLSAL 405
||| : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
D5 236 AARLEALKENGARLAAYHAKATEHLSLSEKAKPALEDLROGLLPVLESFKVSFLSAL 295
||| : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :

Qy 406 EYTKKLTNQ 414
||| : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
D5 296 EYTKKLTNQ 304
||| : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :

RESULT 13
US-09-987-107-52
; Sequence 52, Application US/09987107
; Patent No. 6897039
; GENERAL INFORMATION:
; APPLICANT: GRAVERSEN, Jonas
; APPLICANT: MOESTRUP, Soren
; TITLE OF INVENTION: APOLIPOPROTEINS ANALOGUES
; FILE REFERENCE: GRAVERSENIA
; CURRENT APPLICATION NUMBER: US/09/987,107
; PRIOR FILING DATE: 2001-11-13
; PRIOR APPLICATION NUMBER: US 60/264,022
; PRIOR FILING DATE: 2001-01-26
; PRIOR APPLICATION NUMBER: DK PA2001 00057
; PRIOR FILING DATE: 2001-01-15
; PRIOR APPLICATION NUMBER: DK PA2000 01682
; PRIOR FILING DATE: 2000-11-10
; NUMBER OF SEQ ID NOS: 91
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 52
; LENGTH: 261
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: pT7 H6 Fx Cys-Apo A1 plasmid
; US-09-987-107-52

Query Match          49.1%; Score 1039.5; DB 2; Length 261;
Best Local Similarity 80.8%; Pred. No. 1.3e-67;
```

Matches 211; Conservative 0; Mismatches 1; Indels 49; Gaps 2;

```
Qy 1 MGHHHHH---IEGR-----12
Db 1 MGHHHHHGGIEGRGGDEPPQDPWDRVKDLATVYVDVLKDSGRDYVSQFEGSALGKQL 60
Qy 13 -LKLLDNWDSVTSTFSKLREQLGPVTQBFNDNLEKETEGLRQEMSKDLEEVKAKVQPYLD 71
Db 61 NLKLLDNWDSVTSTFSKLREQLGPVTQBFNDNLEKETEGLRQEMSKDLEEVKAKVQPYLD 120
Qy 72 DFQKKQEMELYRQKVEPLRAELQEGARQKLHELOEKLSPGCEMRDRARAHVDALRTH 131
Db 121 DFQKKQEMELYRQKVEPLRAELQEGARQKLHELOEKLSPGCEMRDRARAHVDALRTH 180
Qy 132 LAPYSDELQRQLAARLEALKENGGRARLAAYHAKATEHLSLSEKAKPALEDLRQGLLPVL 191
Db 181 LAPYSDELQRQLAARLEALKENGGRARLAAYHAKATEHLSLSEKAKPALEDLRQGLLPVL 240
Qy 192 ESFKVSFLSALEYTKLNTQ 212
Db 241 ESFKVSFLSALEYTKLNTQ 261
```

## RESULT 14

```
US-09-987-107-6
; Sequence 6, Application US/09987107
; Patent No. 6897039
; GENERAL INFORMATION:
; APPLICANT: GRAVERSEN, Jonas
; APPLICANT: MOESTRUP, Soren
; TITLE OF INVENTION: APOLIPOPROTEINS ANALOGUES
; FILE REFERENCE: GRAVERSENIA
; CURRENT APPLICATION NUMBER: US/09/987,107
; CURRENT FILING DATE: 2001-11-13
; PRIOR APPLICATION NUMBER: US 60/264,022
; PRIOR FILING DATE: 2001-01-26
; PRIOR APPLICATION NUMBER: DK PA2001 00057
; PRIOR FILING DATE: 2001-01-15
; PRIOR APPLICATION NUMBER: DK PA2000 01682
; PRIOR FILING DATE: 2000-11-10
; NUMBER OF SEQ ID NOS: 91
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 6
; LENGTH: 304
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(58)
; OTHER INFORMATION: Trimerisation module from tetranectin
; NAME/KEY: misc feature
; LOCATION: (59)..(61)
; OTHER INFORMATION: Linker
; NAME/KEY: misc feature
; LOCATION: (62)..(304)
; OTHER INFORMATION: Mature Apo A1
```

## US-09-987-107-6

```
Query Match 49.0%; Score 1038; DB 2; Length 304;
Best Local Similarity 72.5%; Pred. No. 1.9e-67;
Matches 224; Conservative 17; Mismatches 52; Indels 16; Gaps 4;

Qy 112 PLGEEMDRARAHVDALRTHLAPYSDELQRQLAARLEALKENGGRARLAAYHAKATEHLS 171
Db 6 PTPQPKKIYNAKDVNT-----KMFEEUKSRDLDTLAQE-VALLKEQALQTVSLK 57
Qy 172 LSEKAKP-----ALEDLRQGLLPVLESFKVSFLSALEYTKLNTQGLTKLLDNWDSVT 225
Db 58 SSGHDEPPQSPWDRVKDLATVYVDVLKDSGRDYVSQFEGSALGKQLNKLKLLDNWDSVT 115
Qy 226 STFSKLREQLGPVTQBFNDNLEKETEGLRQEMSKDLEEVKAKVQPYLDQFQKKQEMEL 285
Db 116 STFSKLREQLGPVTQBFNDNLEKETEGLRQEMSKDLEEVKAKVQPYLDQFQKKQEMEL 175
```

```
Qy 286 YRQKVEPLRAELQEGARQKLHELOEKLSPGCEMRDRARAHVDALRTHLAPYSDELQRQL 345
Db 176 YRQKVEPLRAELQEGARQKLHELOEKLSPGCEMRDRARAHVDALRTHLAPYSDELQRQL 235
Qy 346 AARLEALKENGGRARLAAYHAKATEHLSLSEKAKPALEDLRQGLLPVLESFKVSFLSALE 405
Db 236 AARLEALKENGGRARLAAYHAKATEHLSLSEKAKPALEDLRQGLLPVLESFKVSFLSALE 295
Qy 406 EYTKKLNTQ 414
Db 296 EYTKKLNTQ 304
```

## RESULT 15

```
US-09-987-107-5
; Sequence 5, Application US/09987107
; Patent No. 6897039
; GENERAL INFORMATION:
; APPLICANT: GRAVERSEN, Jonas
; APPLICANT: MOESTRUP, Soren
; TITLE OF INVENTION: APOLIPOPROTEINS ANALOGUES
; FILE REFERENCE: GRAVERSENIA
; CURRENT APPLICATION NUMBER: US/09/987,107
; CURRENT FILING DATE: 2001-11-13
; PRIOR APPLICATION NUMBER: US 60/264,022
; PRIOR FILING DATE: 2001-01-26
; PRIOR APPLICATION NUMBER: DK PA2001 00057
; PRIOR FILING DATE: 2001-01-15
; PRIOR APPLICATION NUMBER: DK PA2000 01682
; PRIOR FILING DATE: 2000-11-10
; NUMBER OF SEQ ID NOS: 91
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 5
; LENGTH: 301
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(58)
; OTHER INFORMATION: Trimerisation module from tetranectin
; NAME/KEY: misc feature
; LOCATION: (9)..(9)
; OTHER INFORMATION: Mutagen
; NAME/KEY: misc feature
; LOCATION: (15)..(15)
; OTHER INFORMATION: Mutagen
; NAME/KEY: misc feature
; LOCATION: (59)..(301)
; OTHER INFORMATION: Apo-A1 mature
; OTHER INFORMATION: Apo-A1 mature
US-09-987-107-5
```

```
Query Match 48.9%; Score 1036.5; DB 2; Length 301;
Best Local Similarity 73.3%; Pred. No. 2.5e-67;
Matches 225; Conservative 18; Mismatches 55; Indels 9; Gaps 4;

Qy 111 SPLGEEMDRARAHVDALRTHLAPYSDELQRQLAARLEALKENGGRARLAAYHAKATEHLS 170
Db 1 SPGTEPTQPKAIYNAKADV---NTKMFEEUKSRDLDTLAQE-VALLKEQALQTVSLK 56
Qy 171 TLSEKAK---PALEDLRQGLLPVLESFKVSFLSALEYTKLNTQGLTKLLDNWDSVTST 227
Db 57 GSDEPPQSPWDRVKDLATVYVDVLKDSGRDYVSQFEGSALGKQLNKLKLLDNWDSVTST 114
Qy 228 FSKLREQLGPVTQBFNDNLEKETEGLRQEMSKDLEEVKAKVQPYLDQFQKKQEMELYR 287
Db 115 FSKLREQLGPVTQBFNDNLEKETEGLRQEMSKDLEEVKAKVQPYLDQFQKKQEMELYR 174
Qy 288 QKVEPLRAELQEGARQKLHELOEKLSPGCEMRDRARAHVDALRTHLAPYSDELQRQLA 347
Db 175 QKVEPLRAELQEGARQKLHELOEKLSPGCEMRDRARAHVDALRTHLAPYSDELQRQLA 234
Qy 348 RLEALKENGGRARLAAYHAKATEHLSLSEKAKPALEDLRQGLLPVLESFKVSFLSALEBY 407
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Db 235 RLEALKENGARLAAYHAKATEHLSLSEKAKPALEDLRQGLLEPVSFKVSFLSALEYY 294  
Qy 408 TKKLNTQ 414  
Db 295 TKKLNTQ 301

Search completed: December 4, 2005, 06:10:11  
Job time : 48 secs





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Qy 360 LAEYHAKATEHLSTSEKAKPALEDLROGLLPVLESFKVSFLSALEYTKKLNQ 414
Db 189 LAEYHAKATEHLSTSEKAKPALEDLROGLLPVLESFKVSFLSALEYTKKLNQ 243

RESULT 2
US-10-821-234-901
; Sequence 901, Application US/10821234
; Publication No. US20050255114A1
; GENERAL INFORMATION:
; APPLICANT: Labat, Ivan
; APPLICANT: Stache-Crain, Birgit
; APPLICANT: Andarmani, Susan
; APPLICANT: Tang, Y. Tom
; TITLE OF INVENTION: Methods for Diagnosis and Treatment of Preeclampsia
; FILE REFERENCE: 821A
; CURRENT APPLICATION NUMBER: US/10/821,234
; CURRENT FILING DATE: 2004-04-07
; PRIOR APPLICATION NUMBER: US 60/462,047
; PRIOR FILING DATE: 2003-04-07
; NUMBER OF SEQ ID NOS: 1704
; SOFTWARE: pt_seq_genes Version 1.0
; SEQ ID NO 901
; LENGTH: 1586
; TYPE: PRT
; ORGANISM: Homo sapiens
; US-10-821-234-901

Query Match 9.3%; Score 197.5; DB 6; Length 1586;
Best Local Similarity 22.9%; Pred. No. 0.00017;
Matches 126; Conservative 54; Mismatches 189; Indels 181; Gaps 19;

Qy 27 SKLREQGPVTQEPFWDNLEKETEGLRQEMSKDLEEVKAKVPYLD 73
Db 979 SILDALNQATSVESQKNAELAKROELSKVSEKELVESEAVRQDQQRKALEAKAAAF 1038

Qy 74 QKQWQEMELYRKQVPLRAELOGBAROKLH-----ELOEKL 110
Db 1039 EKQVLQQAHSRESEALQKRLDEVSRHELCTQSSHASLRADAEKAEQEQQMAELHSLK 1098

Qy 111 SPLGEEMRDRARAHVDALRTHL---APYSDELRLQRLAARLEALKENGAR-----157
Db 1099 QSSAEVRSKCE-ELSGLHGLOQBARAENSQLTIERIS-IEALLAQARDADQVQASQA 1156

Qy 158 -----LAEYHAKATEHLSTSEKAKP 178
Db 1157 EADQQQTRLKELESQVSGLEKEATELREAVEQQKVKNNDLRKNWKAMEALATAEQACE 1216

Qy 179 ALEDLRQ-----GLLPVLESFKVSFLSALEYTKKLNQTKLLD- 219
Db 1217 KLHSLTQAKSESEKQCLIEAQTWEALLALLPELSVLAQQNYTEWLQDLKEKGGTLLKHP 1276

Qy 220 --NWDSTVSTPSKLRQGLGPVTQEPFWDNLEKETEGLRQEMSKDLEEVKAKVPYLD 277
Db 1277 PAPAEPSSDLASKLRE-----AEETQSTLQASCDQYRSILAETEGMLRDLOK 1323

Qy 278 KWQEMELYRKQVPLRAELOEG--ARQKHELQEKLSPLGE-EMRDRARAHV-----DAL 330
Db 1324 SVEEEQVMRAKVGAABEEELQKSRVTVKHLEIEVEKLK--GELESSQVREHTLHBAEL 1381

Qy 331 RTHLAPYSDE-----LRQL-----NARLEALKEN-----355
Db 1382 EKHWAAASAEQNVAKVAGLRQGLLESQSLDAAKSEAKQKQSDLEALVRQQLSEMKSHV 1441

Qy 356 -----GGARLAEYHAKATE-----HLSTSEKAKPALED---LRQGLLPVLESFKVSFLSA 403
Db 1442 EDGIAGAPASSPAPAEQDPVQLKTQLEWTEALLESDEQTKQKLTAEFEERQTS-ACR 1500

Qy 404 LEEYTKKLN 413
Db 1501 LQSELEKLT 1510
```

```
RESULT 3
US-10-821-234-975
; Sequence 975, Application US/10821234
; Publication No. US20050255114A1
; GENERAL INFORMATION:
; APPLICANT: Labat, Ivan
; APPLICANT: Stache-Crain, Birgit
; APPLICANT: Andarmani, Susan
; APPLICANT: Tang, Y. Tom
; TITLE OF INVENTION: Methods for Diagnosis and Treatment of Preeclampsia
; FILE REFERENCE: 821A
; CURRENT APPLICATION NUMBER: US/10/821,234
; CURRENT FILING DATE: 2004-04-07
; PRIOR APPLICATION NUMBER: US 60/462,047
; PRIOR FILING DATE: 2003-04-07
; NUMBER OF SEQ ID NOS: 1704
; SOFTWARE: pt_seq_genes Version 1.0
; SEQ ID NO 975
; LENGTH: 989
; TYPE: PRT
; ORGANISM: Homo sapiens
; US-10-821-234-975

Query Match 8.7%; Score 184.5; DB 6; Length 989;
Best Local Similarity 22.1%; Pred. No. 0.00053;
Matches 92; Conservative 81; Mismatches 146; Indels 97; Gaps 18;

Qy 15 LLDNWDSTVSTPSKLRQGLGPVTQEPFWDNLEKETEGLRQEMSKDLEEVKAKVPYLD 73
Db 606 LPEKYQEAQBEIIMKLDTLKSNQMTQASD---EADMKEAMRMIDELNKKQVSE-LSQL 660

Qy 74 QKQWQEMELYRKQVPLRAELOGBAROKLHQLQ-EKLSPLGEEMRDRARAHVDALRTHL 132
Db 661 YKEAQAELEDYRK-----RKSLDEVTAETHKAHEKLMQLTNNVSRKAE---DALSEMK 712

Qy 133 APYSDELRLQ--RLAARLEALKENGARLAEBYHAKATEHLSTSEKAKPALEDLROGLLPV 190
Db 713 SQYSKVLNLTQLKQLVDAQENS-----VSIETHLQVIT-TLRTAAKEEKSINL 763

Qy 191 LESFKVSFLSALEYTKKLNQTKLTDNWDSTV-----STFSKLRQGLGPVTQBFWD 244
Db 764 KE-----HLASKEVEVAKLEQ---LLEBKAAMTDAMVPRSSVEKLIQ-----S 803

Qy 245 NLEKETEGLRQEMSKDLEEVKAKVPYLDLDFQKQWQEMELYRKQVPLRAE-----LQ 298
Db 804 SLESEVSVLASKLSESVKE-----KEKVHSEVVQIRSEVSQVKREKENIQTL 851

Qy 299 EGARQKHELQEKLSPLGEEMRDRARAHVDALRTHLAPYSDELRLQRLAARLEALKENGGA 358
Db 852 KSKEQVNNELLQFQQAQBELAEMKR-----YAES-----SSKLEEDKDKKIN 894

Qy 359 RLAEYHAKATEHLSTSEKAKPALEDLROGLLPVLESFKVSFLSALEYTKKLNQ 414
Db 895 EMSKEVTKLKEALNSLSQLSYSTSSSKRQS-----QQLEALQVQKQLQ 940

RESULT 4
US-10-131-826A-16
; Sequence 16, Application US/10131826A
; Publication No. US20050245730A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
```

APPLICANT: Smith,Victoria  
APPLICANT: Stewart,Timothy A.  
APPLICANT: Tunas,Daniel  
APPLICANT: Watanabe,Colin K  
APPLICANT: Wood,William  
APPLICANT: Zhang, Zemin  
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC  
FILE REFERENCE: P3330R1C128  
CURRENT APPLICATION NUMBER: US/10/131,826A  
PRIOR FILING DATE: 2002-04-24  
PRIOR APPLICATION NUMBER: 60/049911  
PRIOR FILING DATE: 1997-06-18  
PRIOR APPLICATION NUMBER: 60/056974  
PRIOR FILING DATE: 1997-08-26  
PRIOR APPLICATION NUMBER: 60/059113  
PRIOR FILING DATE: 1997-09-17  
PRIOR APPLICATION NUMBER: 60/059115  
PRIOR FILING DATE: 1997-09-17  
PRIOR APPLICATION NUMBER: 60/059117  
PRIOR FILING DATE: 1997-09-17  
PRIOR APPLICATION NUMBER: 60/059122  
PRIOR FILING DATE: 1997-09-17  
PRIOR APPLICATION NUMBER: 60/059184  
PRIOR FILING DATE: 1997-09-17  
PRIOR APPLICATION NUMBER: 60/059263  
PRIOR FILING DATE: 1997-09-18  
PRIOR APPLICATION NUMBER: 60/059352  
PRIOR FILING DATE: 1997-09-19  
PRIOR APPLICATION NUMBER: 60/059588  
Remaining Prior Application data removed - See File Wrapper or PALM.  
NUMBER OF SEQ ID NOS: 550  
SEQ ID NO 16  
LENGTH: 691  
TYPE: PRT  
ORGANISM: Homo Sapien  
US-10-131-826A-16

Query Match 7.6%; Score 160.5; DB 6; Length 691;  
Best Local Similarity 22.8%; Pred. No. 0.0076;  
Matches 107; Conservative 77; Mismatches 157; Indels 129; Gaps 23;

Qy 8 HIEGRKLKLDNWDVSPTS-----TFSKLREQLGVPVTOEFWDNLEKTEGRLQEMSKDLE 60  
Db HVARILELDDIQTISEKVLTKVELDLRLDRTVKALTR-----QEKLLGQLKEVQADKE 280  
Qy 61 EVKAKVPYLDLDFQ-----KKWQEMELYRQK-----VEP 90  
Db QSEAELOVAQOENHHLNLDLKEAKSWQEEQSAQAQRLKDKVAQMKDTLGGQAQORVAELEP 340  
Qy 91 LRAELOEGAROKLHELQKSLPLGCEMRDRARAHVDALRTHLAPYSDELRLQRLAARLEAL 150  
Db LKEQLR-GAQLAASSQKATLLGEEELASAAAARDRTIA-----ELHR---SRLEVA 388  
Qy 151 KENGARLAE--YHAKATEHLSTLSEKAKPALEDLROGLLPVLESFKVSFSL-----AL 202  
Db EVNG--RLAELGLHLK-----BEKQWSKE--RAGLLQSVAEAKDKILKLSAEIURL 436  
Qy 203 EYTKKLTQGTL-----KLDDNWDVSPTSFKLREQLGVPVTOEFWDNLEKTEGRLQEMSK 259  
Db EKAVQERTONQVFKTELAREKDSLVQSEKRELTELRSAL-RVLQKEKEQLQEEKQE 495  
Qy 260 DLE---EVKAKVPYLDLDFQKKWQEMELYRQKVEPLRAELQEGAROKLHELQKSLPLG 316  
Db LLEYMKLEARLEKVADE---KWNED-----ATTEDEAAVGLSCPAALTDSSE-SP-- 544  
Qy 317 EEMDRARAHVDALRTHLAPY-----SDELQRLAARLEALKE-----NGGAR 359  
Db EDNR-----LPPYGLCERGDPGSPAGPREASPLVVISQAPAPISPHUSGPAP 591  
Qy 360 LAETHAKATEHLSTL-----SEKAKPALEDLROGLLPVLESFKVSFSL 402

Db 592 DSSSDSEADEKSVLMAAVQSGGGEANLLLPGLGSFYDMASGFTVGTLS 641

RESULT 5  
US-10-821-234-963  
Sequence 963, Application US/10821234  
Publication No. US20050255114A1  
GENERAL INFORMATION:  
APPLICANT: Labat, Ivan  
APPLICANT: Stache-Crain, Birgit  
APPLICANT: Andarmani, Susan  
APPLICANT: Tang, Y. Tom  
TITLE OF INVENTION: Methods for Diagnosis and Treatment of Preeclampsia  
FILE REFERENCE: 821A  
CURRENT APPLICATION NUMBER: US/10/821,234  
CURRENT FILING DATE: 2004-04-07  
PRIOR APPLICATION NUMBER: US 60/462,047  
PRIOR FILING DATE: 2003-04-07  
NUMBER OF SEQ ID NOS: 1704  
SOFTWARE: pt\_seq\_genes Version 1.0  
SEQ ID NO 963  
LENGTH: 703  
TYPE: PRT  
ORGANISM: Homo sapiens  
US-10-821-234-963

Query Match 7.6%; Score 160.5; DB 6; Length 703;  
Best Local Similarity 22.8%; Pred. No. 0.0077;  
Matches 107; Conservative 77; Mismatches 157; Indels 129; Gaps 23;

Qy 8 HIEGRKLKLDNWDVSPTS-----TFSKLREQLGVPVTOEFWDNLEKTEGRLQEMSKDLE 60  
Db HVARILELDDIQTISEKVLTKVELDLRLDRTVKALTR-----QEKLLGQLKEVQADKE 292  
Qy 61 EVKAKVPYLDLDFQ-----KKWQEMELYRQK-----VEP 90  
Db QSEAELOVAQOENHHLNLDLKEAKSWQEEQSAQAQRLKDKVAQMKDTLGGQAQORVAELEP 352  
Qy 91 LRAELOEGAROKLHELQKSLPLGCEMRDRARAHVDALRTHLAPYSDELRLQRLAARLEAL 150  
Db LKEQLR-GAQLAASSQKATLLGEEELASAAAARDRTIA-----ELHR---SRLEVA 400  
Qy 151 KENGARLAE--YHAKATEHLSTLSEKAKPALEDLROGLLPVLESFKVSFSL-----AL 202  
Db EVNG--RLAELGLHLK-----BEKQWSKE--RAGLLQSVAEAKDKILKLSAEIURL 448  
Qy 203 EYTKKLTQGTL-----KLDDNWDVSPTSFKLREQLGVPVTOEFWDNLEKTEGRLQEMSK 259  
Db EKAVQERTONQVFKTELAREKDSLVQSEKRELTELRSAL-RVLQKEKEQLQEEKQE 507  
Qy 260 DLE---EVKAKVPYLDLDFQKKWQEMELYRQKVEPLRAELQEGAROKLHELQKSLPLG 316  
Db LLEYMKLEARLEKVADE---KWNED-----ATTEDEAAVGLSCPAALTDSSE-SP-- 556  
Qy 317 EEMDRARAHVDALRTHLAPY-----SDELQRLAARLEALKE-----NGGAR 359  
Db EDNR-----LPPYGLCERGDPGSPAGPREASPLVVISQAPAPISPHUSGPAP 603  
Qy 360 LAETHAKATEHLSTL-----SEKAKPALEDLROGLLPVLESFKVSFSL 402  
Db DSSSDSEADEKSVLMAAVQSGGGEANLLLPGLGSFYDMASGFTVGTLS 653

RESULT 6  
US-10-821-234-1662  
Sequence 1662, Application US/10821234  
Publication No. US20050255114A1  
GENERAL INFORMATION:  
APPLICANT: Labat, Ivan  
APPLICANT: Stache-Crain, Birgit  
APPLICANT: Andarmani, Susan  
APPLICANT: Tang, Y. Tom  
TITLE OF INVENTION: Methods for Diagnosis and Treatment of Preeclampsia

```
; FILE REFERENCE: 821A
; CURRENT APPLICATION NUMBER: US/10/821.234
; CURRENT FILING DATE: 2004-04-07
; PRIOR APPLICATION NUMBER: US 60/462,047
; PRIOR FILING DATE: 2003-04-07
; NUMBER OF SEQ ID NOS: 1704
; SOFTWARE: pt_seq_genes Version 1.0
; SEQ ID NO 1662
; LENGTH: 747
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-821-234-1662

Query Match          7.4%; Score 157.5; DB 6; Length 747;
Best Local Similarity 22.1%; Pred. No. 0.012;
Matches 91; Conservative 71; Mismatches 139; Indels 111; Gaps 17;

Qy 10 EGRLLDNWDSVTSTFSKRLQGLPVTQFWDNLEKETEGLRQEMSKOLEEVKAKVQPY 69
Db 162 EELKLIATVLEKET---AQLREQVGRMEREL--NHEKERCDOQLAQEQKGLTEVTQSLKME 216

Qy 70 LDDFQKKWQOEEMELYRQKVEPLRAELQEGARQKLHELQEKLSPLGGEEMRDRARAHVDALR 129
Db 217 NEEFKGRFSD-----ATSKAHVVEEDIVSVTHKAIEK-ETELDSLK 256

Qy 130 THLAPYSDELQRRLAARLEALKENGARLAAYHAKATEHLSTLSEKAKPALEDLRQGLLP 189
Db 257 DKLKKAQHE-REQLECOLKTEKDE--KELYKVHUKNTE----- 291

Qy 190 VLESFKVSFLSALBEYTKLNTQGLTKLLD-NMDSVTSTFSKRLQGLPVTQFWDNLE- 247
Db 292 -----LENTKLMSEVQTLKNDGNKESVITHF---KEETG-----RLQL 327

Qy 248 --KETEGLRQEMSKDLEEVKAKVOP-YLDDFQKKWQOEEMELYRQKVEPLRAELQEGARQK 304
Db 328 CLAEKENLQRTF---LLTSSKEDTCFLKEQLRAERQVQATROEVVFLAKELSDAV--- 381

Qy 305 LHELQEKLSPLGGEEMRDRARAHVDALRTHLAPYSDELQRRLAARLEALKENGARLAAYH 364
Db 382 -----NVRDRTWADLTARLE-----NEKVKQLADAVAEKLNA-----M 417

Qy 365 AKATEHLSTLSEKAKPALEDLRQGLLPVLESFKVSF--LSALBEYTKLNTQ 414
Db 418 KKQDKDTTLEHELRRREVEDLKRLQMAADHYKEKFEQCQLQKINKLSQ 469

RESULT 7
US-10-821-234-998
; Sequence 998, Application US/10821234
; Publication No. US20050255114A1
; GENERAL INFORMATION:
; APPLICANT: Labat, Ivan
; APPLICANT: Stache-Crain, Birgit
; APPLICANT: Andarmani, Susan
; APPLICANT: Tang, Y. Tom
; TITLE OF INVENTION: Methods for Diagnosis and Treatment of Preeclampsia
; FILE REFERENCE: 821A
; CURRENT APPLICATION NUMBER: US/10/821.234
; CURRENT FILING DATE: 2004-04-07
; PRIOR APPLICATION NUMBER: US 60/462,047
; PRIOR FILING DATE: 2003-04-07
; NUMBER OF SEQ ID NOS: 1704
; SOFTWARE: pt_seq_genes Version 1.0
; SEQ ID NO 998
; LENGTH: 514
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-821-234-998

Query Match          7.2%; Score 152; DB 6; Length 514;
Best Local Similarity 23.5%; Pred. No. 0.016;
Matches 70; Conservative 56; Mismatches 102; Indels 70; Gaps 12;
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Qy 42 DNLEKETEGRLRQEMSKOLEEVKAKVOPYL-----DDFOKKWQOEEMELYRQKVEPLRAE 94
Db 81 DESEEEEGMEQGLEEE-EEVDPRIOGELEKLNQSTDDINR-ETELEDARQKRSVLVE 138
Qy 95 LOEGARQKLHELQEKLSPLGGEEMRDRARAHVDALRTHLAPYSDELQRRLAARLEALKENG 154
Db 139 ----ATVKLDELVKIKGAVEDSK-----PYWEARRVARQAQLEA----- 174
Qy 155 GARLAAYHAKATEHLSTLSEKAKPALEDLRQGLLPVLESFKVSFLSALBEYTKLNTQGT 214
Db 175 -----QKATQDFQRAATEVLRAAKETISLABQRLLDDKRFDSAWQB-----MLNHAT 222
Qy 215 LKLLDNWDSVTSTFSKRLQGLPVTQFWDNLEKETE-----GLRQEMSKOLEEVKAK 267
Db 223 QRWE-----AQQTTRSEL-----VHKETAARYNAAMGRMROLEKLLKRAINK 266
Qy 268 VOPYLDDFQKKWQOEEMELYRQKVEPLRAELQEGARQKLHELQEKLSPLGGEEMRDRARA 325
Db 267 SKPYF-ELKAKYVQLEQLKKTVDLQAKUTL-AKGEYKMAKNLEMSDEIHERRS 322

RESULT 8
US-10-984-645-2
; Sequence 2, Application US/10984645
; Publication No. US20050244386A1
; GENERAL INFORMATION:
; APPLICANT: Habener, Joel
; APPLICANT: Zulewski, Hendrik
; APPLICANT: Abraham, Elizabeth
; APPLICANT: Vallejo, Mario
; TITLE OF INVENTION: METHOD OF TRANSPLANTING IN A MAMMAL AND TREATING DIABETES MELLITUS
; TITLE OF INVENTION: BY ADMINISTERING A PSEUDO-ISLET LIKE AGGREGATE DIFFERENTIATED FROM
; TITLE OF INVENTION: A NESTIN-POSITIVE PANCREATIC STEM CELL
; FILE REFERENCE: 3284/1233
; CURRENT APPLICATION NUMBER: US/10/984,645
; CURRENT FILING DATE: 2004-11-09
; PRIOR APPLICATION NUMBER: US 09/731,255
; PRIOR FILING DATE: 2000-12-06
; PRIOR APPLICATION NUMBER: US 60/169,082
; PRIOR FILING DATE: 1999-12-06
; PRIOR APPLICATION NUMBER: US 60/215,109
; PRIOR FILING DATE: 2000-06-28
; PRIOR APPLICATION NUMBER: US 60/239,880
; NUMBER OF SEQ ID NOS: 55
; SOFTWARE: Patent in version 3.2
; SEQ ID NO 2
; LENGTH: 1618
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-984-645-2

Query Match          7.2%; Score 152; DB 6; Length 1618;
Best Local Similarity 22.9%; Pred. No. 0.057;
Matches 95; Conservative 69; Mismatches 169; Indels 82; Gaps 17;

Qy 6 HHIEGRLLDNWDSVTSTFSKRLRQGLPVTQFWDNLEKETEGLRQEMSKOLEEVKAK 65
Db 473 HSSLEAK-----DGESEGGSRVFSICR---GEGEQIWLVEKET-----AIEGK 513
Qy 66 VOPYLDDFQKKWQOEEMELYRQKVEPLRAELQEGARQKLHELQEKLSPLGGEEMRDRARAHV 125
Db 514 VVSSLQ--QIWEEE-DLNRKEIQDSQVPLE-----KTKLSLGEIEQSLKTL 560
Qy 126 DALRTHLAPYSDELQRRLAARLEAL-----KEN-----GGAARLAAYHAKATEHLSTLSE 174
Db 561 NQSHETLERENQECPRSLBEDLTLKSLKLEKENRAIKGCGGSETS--RKGRQLKPTGK 618
Qy 175 KAKPALEDLR---QGLLPVLESFKVSFLSALBEYTKLNTQGLTKLLDNWDSVTSTFSKL 231
Db 619 EDTQTLLQSLQKENQELMKSLGNLFTLFPFQTE-----NOELVSSLQENLESLETALEKEN 673
Qy 232 REQLGPVTQFWDNLEKETEGLRQEMSKOLEEVKAKVOPYLDDFQKKWQOEEMELYRQK-- 289
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Qy 320 RDRARAHVDAL-----RTHLAPYSDELRLQRLAARL-EALKENGARLAEBYHA 365
Db 328 GGTRRLQPDVLNLPDNKQIVDSKVSILTAI---VRYTQADADAEEAARE-----LAAYIA 379
Qy 366 KATEHLSTLSEKAKPALE-----DLRQGLLPVLESFKVSFLSALE 405
Db 380 SIRAHMGLSLKDYTDLEGVNTLDFVFMFIPV-----BPAYLLALQ 420

RESULT 14
US-10-793-626-1660
; Sequence 1660, Application US/10793626
; Publication No. US20050255478A1
; GENERAL INFORMATION:
; APPLICANT: KIMMERLY, WILLIAM JOHN
; TITLE OF INVENTION: STAPHYLOCOCCUS EPIDERMIDIS NUCLEIC ACIDS AND PROTEINS
; FILE REFERENCE: PU3480US
; CURRENT APPLICATION NUMBER: US/10793,626
; CURRENT FILING DATE: 2004-03-04
; PRIOR APPLICATION NUMBER: 60/164,258
; PRIOR FILING DATE: 1999-11-09
; NUMBER OF SEQ ID NOS: 4472
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 1660
; LENGTH: 885
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: synthetic
; OTHER INFORMATION: amino acid sequence
US-10-793-626-1660

Query Match 6.5%; Score 137; DB 6; Length 885;
Best Local Similarity 19.3%; Pred. No. 0.2;
Matches 83; Conservative 71; Mismatches 137; Indels 138; Gaps 17;

Qy 5 HHHIEGLKLLDNWDSVTSTFKLREQLPVTOEFWDNLEKETEGLRQEMSKDLSEVKA 64
Db 528 HHHELE-----LDRLKTQEAHLKNEHEFEFEKNDGYOSDKSK--ETLKE 570
Qy 65 KVQPYLDLDFQ---KKWQEMELYRQKVEPLRAELQEGARQKLHELQEKLSPLGEMDRDA 121
Db 571 K-QNHLEIQOOLKQLESDIERYTQLSKEGKASTHQ-TQQQLHQKQSLAVVKEIRKSQK 628
Qy 122 RAHVDAUTHLAPYSDELRLQRLAARL-EALKENGARLAEBYHAKATEHLSTLSEKAKPALE 181
Db 629 QVY-ERLDKQL---SDSERQKI-----EYNEKIKLFNS 657
Qy 182 DLROGLLPVLESFKVSFLSALAEYTKLNTQGTLLKLLDNWDSVTSTFKLREQLPVTOE 241
Db 658 DEMMG-----KDAFEKLREQI----- 673
Qy 242 FWDNLEKETEGLRQEMSKDLSEVKAQVPLDDFQKKWQEMELYRQKVEPLRAELQ--E 299
Db 674 -----QQENVRONLQSLSEIKQ-----RKDLNEKIEINESQLKCHQDILSIE 719
Qy 300 GARQKLHELQEKLSPLGEMRD-----RAHVDAUTHLAPYSDELRLQRLAAR 348
Db 720 NHYQDIKAKQSKLDVLINHAIDLNDTYLTAVTARMEDYSDET-----IDNLRKKVKLT 774
Qy 349 LEALKENGARL--AEYHAKATEHLSTLSE-----KAKPALEDLROGLLPVLES-FKVS 399
Db 775 KWTIDELGPVNLNATEQFEELNERYTFINEQRTDLREAKETLEQIIHEMDKEVEGRFKTT 834
Qy 400 FLSALEEYV 408
Db 835 FHAVQDHFT 843

```

RESULT 15  
US-11-074-176-134  
; Sequence 134, Application US/11074176  
; Publication No. US20050250135A1

```

; GENERAL INFORMATION:
; APPLICANT: Klaenhammer, Todd R.
; APPLICANT: Russell, William M.
; APPLICANT: Altermann, Eric
; APPLICANT: McNuliffe, Olivia
; APPLICANT: Peril, Andrea Azcarate
; TITLE OF INVENTION: Nucleic Acid Sequences Encoding
; FILE REFERENCE: 5051-694
; CURRENT APPLICATION NUMBER: US/11/074,176
; CURRENT FILING DATE: 2005-03-07
; PRIOR APPLICATION NUMBER: 60/551,161
; PRIOR FILING DATE: 2004-03-08
; NUMBER OF SEQ ID NOS: 381
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 134
; LENGTH: 1189
; TYPE: PRT
; ORGANISM: Lactobacillus acidophilus
; US-11-074-176-134

Query Match 6.4%; Score 135; DB 7; Length 1189;
Best Local Similarity 22.2%; Pred. No. 0.35;
Matches 92; Conservative 66; Mismatches 160; Indels 96; Gaps 18;

Qy 14 KLLDNWDSVTSTFKLREQLPVTOEFWDNLEKETEGLRQEMSKDLSEVKA----KVQPY 69
Db 183 KTDQNLIRINDLVKELESRLPLENEQ--SSLAKKEYKFKGSLDKKXSLLAFEIENINQ 240
Qy 70 LDQFOK-----KWQEMELYRQKVEPLRAEL-----QEGARQKLHELQEKLSPL 113
Db 241 REDIQSADKNKILLAKLLDDDEVKDSQAAVTQKRAEYKKLRDRDHTQNKLLKSLSEL 300
Qy 114 GS-EMDRARAHVDALRTHLAPYSDELQ---RLAARLEALKENGARLAEBY-----H 162
Db 301 NASLQMAEQSRQFDDATKEBYKQKQKQKQKQKQKQKQKQKQKQKQKQKQKQKQK 360
Qy 163 AKATEHLSTLSEKAKPALEDLROGLLPVLESFKVSFLSALAEYTKLNTQGTLLKLLDNW 222
Db 361 GQLTGEUNEDPEELNKKLDDIR-----NNYMQLLQDQATTN-----N 397
Qy 223 SVTSTFKLRE-----QLGPVTOEFWDNLEKETEGLRQEMSKDLSEVKAQVPLDDF 275
Db 398 QIVNLSDLARSQADTTYQTGDSVSKQLTD-AQKLEQLRTIE-GKKLTDKROKEQNAIVRI 455
Qy 276 QKKWQEB---EMELYRQKVEPLRAELQEB-----GARQKLHELQEB-- 310
Db 456 NKQNNQNLTELTLNRQVNVNARNELEKVEARHEALVNIQKHEGYGYYGVNVNLAHLNDF 515
Qy 311 -KLSPLGEMDRARAHVDALRTHLAPYSDEL--RQLAAR--LEALKENGAR 359
Db 516 GVITGAVGELITFPALAELE-AMTTALGGGVQDVLITESRISARNAINKLNKHGGR 568

Search completed: December 4, 2005, 06:23:11
Job time : 13 secs

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